

# **Recycled Water Workshop Report**

*(Order Instituting Rulemaking 10-11-014)*

## **Division of Water and Audits**

Prepared by Moises Chavez and Carmen Rocha

February 1, 2013

---

# Recycled Water Workshop Report

---

February 1, 2013

## ***Workshop Report Summary***

### **A. Order Instituting Rulemaking 10-11-014**

The California Public Utilities Commission (“Commission” or “CPUC”), on November 19, 2010 opened Order Instituting Rulemaking (“Rulemaking”) 10-11-014<sup>1</sup> for the purpose of developing a comprehensive policy framework for recycled water for Class A and B regulated water utilities and comparably-sized sewer utilities (referred to as in this report as Investor-Owned Water and Sewer Utilities (IOWSU)).<sup>2</sup> The initial goals outlined in the Rulemaking were:

1. Establishment of guiding principles of rate design and rate setting parameters for determining the recycled water rates;
2. Reduction and/or elimination of barriers to collaboration between public agency and investor-owned wholesale and retail recycled water purveyors;
3. Facilitation and/or incentivizing use of cost-effective recycled water where it is or can be made available; and
4. Examination of recent State policy and legislation governing the State’s goals for the production, delivery and use of recycled water, including interagency coordination and collaboration to implement recycled water production, sales, and delivery guidelines per existing State and Federal statutes and regulations.

On June 16, 2011, an Assigned Commissioner’s Ruling and Scoping Memo was issued delineating further the issues that would be considered in the Rulemaking, including notice of workshops that would be convened by the Commission’s Policy and Planning Division (PPD). This Workshop Report is the work product resulting from the five workshops and the comments received from parties<sup>3</sup> (referred to as commenting parties in this report) on the draft policy guidelines and minimum requirements for recycled water project proposals that the Division of Water and Audits (DWA) issued for comment. More information on the workshop

---

<sup>1</sup> Order Instituting Rulemaking on the Commission’s own motion to consider a comprehensive policy framework for recycled water.

<sup>2</sup> Class A and B water utilities are companies with more than 10,000 and 2,000 service connections, respectively.

<sup>3</sup> Comments were filed by the Division of Ratepayer Advocates, California Water Association, California Water Service Company, and Consumer Federation of California.

# Recycled Water Workshop Report

---

February 1, 2013

presentations and discussions is provided in the workshop summary section of this report.

On behalf of DWA and PPD we thank the State and Federal agencies, participating and commenting parties, and stakeholders for their contribution in the development of Commission's recycled water policies.

## **B. Summary of Recommendations**

1. DWA recommends the Commission consider for adoption the recycled water policy guidelines included in Attachment A of this report developed from information gathered through the workshop process, input from parties and stakeholders, and industry experts participating in the workshops. The proposed policy guidelines were developed within the existing statewide framework of recycled water law, policy and regulations with the goal of advancing the production, distribution and use of recycled water by the IOWSUs in meeting the state's growing demand for water supply and recycled water goals. Key policy recommendations include:
  - a. Consistent with the Water Action Plan policies, promote the consideration and implementation of recycled water projects that are cost-effective, reliable and affordable sources of water supply and that are in the public interest;
  - b. Support the State Water Resource Control Board's recycled water goal for California to increase the use of recycled water over 2002 levels by one million acre-feet per year (afy) by 2020 and by two million afy by 2030 by:
    - i. Requiring the IOWSUs to actively pursue recycled water project opportunities in their region(s) and participate in the State's Integrated Regional Water Resource (IRWR) planning and management, specifically relative to recycled water;
    - ii. Requiring each IOWSU in its General Rate Cases to report on those recycled water opportunities in its region that is considering or has undertaken, and to the extent it opts not to consider/pursue those opportunities to justify why not.

# Recycled Water Workshop Report

---

February 1, 2013

- c. Strengthening interagency coordination with California Department of Public Health, Department of Water and Resources, and State Water Resource Control Board (including the Regional Water Resource Control Boards) in the areas of: 1) recycled water regulations; 2) use of recycled water in regional resource planning and management; 3) public funding for recycled water projects; 4) developments in water treatment technologies; and 5) changes in permitting requirements for recycled water projects.
  - d. Requiring that all recycled water being distributed and/or sold by the IOWSUs be covered by permits for its intended use;
  - e. Requiring cost-benefit (economic) analysis for new recycled water projects proposed by the IOWSUs, including a comparative analysis of the energy costs and savings and greenhouse gas emissions as part of the economic analysis;
  - f. Ratemaking treatment of recycled water projects should be done on a case-by-case basis because of the significant variability associated with:
    - 1) recycled water project costs; 2) project funding and partnerships; and
    - 3) customer infrastructure costs and incentives.
2. DWA recommends adoption of the Minimum Criteria Requirements (MCRs) included in Attachment B for reviewing and evaluating recycled water projects proposed by the IOWSUs in standalone applications or General Rate Case applications. MCRs include requiring the IOWSUs to provide:
- a. Information on the general structure of contractual agreements and partnerships (such as cost-sharing and key terms of the agreements ) entered into when undertaking a recycled water projects, including information on public funding assistance;
  - b. Cost-benefit analysis for new projects to assess the costs and benefits (including non-monetized benefits such as system reliability and/or redundancy) from a societal and ratepayer perspective;
  - c. Information on bases for customers incentives and ratemaking treatment of recycled water projects;

# Recycled Water Workshop Report

---

February 1, 2013

- d. General project costs information and corresponding revenue requirement and rate design;
  - e. Information on the recycled water project need and supply potential; and
  - f. Compliance with all environmental and permitting requirements.
3. DWA recommends a Tier 3 Advice Letter process for the review of recycled water projects meeting the following criteria:
- a. Have a revenue impact of less than 5% of the proposing IOWSU's revenue requirement in the ratemaking area where the project is being proposed;
  - b. Not requiring an environmental review and/or with all environmental review completed and certified; and
  - c. Not requiring direct potable reuse as defined by Water Code Sections 13560 (a) et. seq.
4. All of the recommended MCRs in paragraph 2. above apply to recycled water projects eligible for review by Tier 3 Advice Letter process, except for the economic analysis.

## **C. Summary of Issues Needing Further Information or Review**

- 1. Parties should confirm whether the Commission General Order 103-A<sup>4</sup> adequately address the operation and maintenance standards for recycled water facilities, including the Commission's oversight over recycled water quality.
- 2. This Workshop Report does not address or considered the United States Environmental Protection Agency's (U.S. EPA) 2012 Guidelines for Water Reuse and they should be considered in the Commission's final recycled water policy guidelines.

## ***I. Recycled Water Regulation and Oversight***

### **A. Recycled Water Regulation**

- 1. Recycled Water Definition

---

<sup>4</sup> Rules Governing Water Service, Including Minimum Standards for Operation, Maintenance, Design and Construction.

# Recycled Water Workshop Report

---

February 1, 2013

For the purpose of this Rulemaking and report, “recycled water” (also referred to as reclaimed water) means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource, as defined in Section 13050 (n) of California Water Code.

## 2. Multi-agency Governance over Recycled Water

Various federal government and the state agencies have jurisdiction over the quality and quantity of wastewater discharge into the public waterways in the United States. The Federal Water Pollution Act Control Act (referred to as Clean Water Act) is the primary authority for the regulation of wastewater, which requires states to set the water quality standards and establishes the rights to control pollution from Waste Water Treatment Plants, as long as the regulations are at least as stringent as federal rules.<sup>5</sup>

In California the oversight of recycled water is conducted mainly by the California Department of Public Health (CDPH) and the State Water Resources Control Board (Water Board, including within it the nine California Regional Water Quality Control Boards). CDPH is the primary state agency responsible for protection of public health and the regulation of drinking water. It sets the standards for recycled water and reviews cross control connections between potable and non-potable water systems. The Water Board consults with and applies the criteria of CDPH in regulating recycled water projects through permit processes. The Water Board has adopted a Recycled Water Policy that: 1) encourages the streamlining of the permit process for recycled water projects; and 2) promotes a state-wide increase in the use of recycled water through mandated goals for 2020 and 2030. Detailed information about the recycled water programs of the CDPH and Water Board was presented during the workshops and is available at: <http://www.cpuc.ca.gov/PUC/Water/WaterEvents/>

## 3. Evolving Pattern of Public-Private Partnerships

The entities treating municipal waste in the state typically are public agencies. Many of these publicly-owned waste water treatment entities operate at a regional scale and the recycled water that they produce commonly is allocated to multiple water purveyors,

---

<sup>5</sup> Major objectives of the Clean Water Act are to eliminate all pollutant discharges into navigable waters, stop discharges of toxic pollutants in toxic amounts, develop waste treatment management plans to control resources of pollutants, and encourage water reclamation and reuse through delegation agreements.

# Recycled Water Workshop Report

---

February 1, 2013

both public and/or investor-owned. This often involves multi-lateral delivery and pricing agreements critical to reliability of supply to the repayment of capital investment and to the coverage of operating cost. It can also involve a network of recycled water distribution systems separately constructed and owned but integrated through agency partnership agreements. Since most IOWSUs recycled water projects are part of a larger or associated public agency project, they fall into the category of public-private partnerships and call for interagency cooperation and collaboration. For examples, see Attachment D.

#### 4. Role of the Commission Relative to Other Public Agencies and to the IOWSUs

The Commission regulates the water service provided by each IOWSU without regard to the source of the water (e.g., well water, surface water, water purchased from other utilities, recycled, or desalinated water). Whatever the makeup of an IOWSU's water supply portfolio, the Commission is responsible under Public Utilities Code Section 451 for seeing to it that the IOWSU:

“... shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities...as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public. All rules made by public utility affecting or pertaining to its charges or service to the public shall be just and reasonable.”

As far as recycled water, in particular, and water quality, in general, are concerned, the Commission's oversight of the IOWSUs is guided and governed by criteria promulgated by CDPH and the Water Board (including the Regional Boards). The Water Board, which has taken the lead in setting recycled water policy for the state, in its most recently adopted recycled water policy calls for “local and regional water agencies to move toward clean, abundant, local water for California by emphasizing appropriate water recycling, water conservation, and maintenance of supply infrastructure...,” among other things, noting that such “sources of supply are drought-proof, reliable, and minimize our carbon footprint and can be sustained over the long-term.”<sup>6</sup>

The Water Board has also adopted a recycled water goal for California to increase the use of recycled water over 2002 levels by at least one million acre-feet per year (afy) by 2020 and by at least two million afy by 2030, as well as other goals for stormwater use and water conservation. Included in the Water Board's policy goals is the substitution of

---

<sup>6</sup> Preamble, January 22, 2013, Water Board Recycled Water Policy.

# Recycled Water Workshop Report

---

February 1, 2013

as much recycled water for potable water as possible by 2030. The Water Board has recognized the Commission's roles in approving rates and terms of service for the use of recycled water by IOWSUs, as well as its role in encouraging the use of recycled water.<sup>7</sup> The Commission should therefore recognize that it shares a responsibility with other public agencies in the state to encourage the use of recycled water that complies with state standards of public health and to promote an increase in its use so that IOWSUs can contribute responsibly to the state-wide efforts being made toward meeting the goals set for 2020 and 2030.

## 5. Senate Bill 918

Senate Bill (SB) 918 enacted on August 26, 2010 (amended Water Code Sections 13350 and 13560) requires the CDPH to develop criteria by December 31, 2013 for safely using recycled water to supplement groundwater basins and reservoirs. SB 918 also requires CDPH to investigate the feasibility of developing uniform water recycling criteria for direct potable re-use and provide a report to the legislature by December 31, 2016. DWA provides the above information to inform the Commission of potential upcoming regulatory changes governing the use of recycled water for supplementing groundwater basins and reservoirs, as well as direct potable re-use of recycled water. Such changes would likely require the Commission to revisit its recycled water policies.

## ***II. Workshop Process and Overview***

The Commission's PPD along with the DWA conducted five workshops as part of the Rulemaking. The workshops consisted of a series of presentations and discussions from panelists, stakeholders, state and federal agencies with jurisdiction over recycled water regulation, and various parties in the Rulemaking. Summaries of the first two workshops were served on the Rulemaking's service list and are included in Attachment F of this report. The online files containing all of the workshop presentations can be found at: <http://www.cpuc.ca.gov/PUC/Water/WaterEvents/>

The following discussion summarizes the workshops, including additional information not covered in the first and second workshop summaries.

---

<sup>7</sup> SWRCB, Preamble, 1-22-13 Recycled Water Policy



# Recycled Water Workshop Report

---

February 1, 2013

Workshop 1 addressed the state regulatory framework for recycled water projects, as well as the IOWSUs' experience with recycled water projects. The state Water Board was the primary presenter. Its presentation included an overview of the Water Board's (including the Regional Boards') recycled water regulations and project funding programs, the roles of the State and Regional Water Boards in permitting of water recycling operations, and the applicable water rights law. The Water Board also emphasized the goals and mandates it has set out in its 2012 Recycled Water Policy as well as its recycled water discharge requirements in California. The Water Board also indicated that the State's Integrated Water Resource Management Planning (IWRMP) program is a collaborative effort between the Water Board and DWR for managing all aspects of water resources in a region.

The Department of Water Resources (DWR) presentation included an overview of its recycled water regulations and other activities, including recycled water regulations for plumbing within buildings, urban water use targets and plans, and its roles in the Economic Analysis Task Force for Water Recycled Water Task Force (EATF).<sup>8</sup> DWR also gave an overview of the IWRMP grant program funding opportunities.

The CDPH provided an overview of its recycled water standards (levels and types of treatment) and allowed uses for ensuring public health safety and its process for reviewing recycled water proposals for compliance with Title 22 (California Safe Drinking Water Act rules) and Title 17 (includes cross-connection control regulations) criteria and regulations. In addition, CDPH is also developing the groundwater recharge regulations required by SB 918 which are to be completed and approved by December 31, 2013.

San Gabriel Valley Water Company, San Jose Water Company, Suburban Water Systems, Park Water Company, California Water Service Company, and California Water Association, described their existing recycled water programs. The municipal water utilities-- West Basin

---

<sup>8</sup> The EATF consisted of technical experts in economic analysis and policy from State and Federal agencies involved in recycled water regulation and policy, as well as University of California Davis.

# Recycled Water Workshop Report

---

February 1, 2013

Municipal Water District, Santa Clara Valley Water District, and Upper San Gabriel Valley Water District also presented information on their existing recycled water programs, describing such features as partnerships, recycled water components, ratemaking, and customer demands. The DRA, the Planning and Conservation League, the Clean Water Action, and the Southern California Watershed Alliance also presented their views on recycled water and the complex factors associated with recycled water projects (e.g., public acceptance, building codes, needed infrastructure in new communities, and local permitting agencies).

Workshop 2 consisted of an in depth presentation and discussion of the “Guidelines for Preparing Economic Analysis for Water Recycling Projects” developed and presented by staff from the EATF for Water Recycling in California. See attachment F for the workshop summary.

Workshop 3 addressed the economics of recycled water and sought a better understanding of the wholesale and retail cost of recycled water. Workshop 3 examined the different recycled water customer classes of IOWSUs that are engaged in the production, distribution and/or sale of recycled water. The IOWSUs and CWA provided an overview of: 1) the Water Recycling Act of 1991 (Water Code Sections 13575 to 13583); 2) the ratemaking principles underlying recycled water rates and cost allocation; and 3) the sources of grant and loan funding for IOWSU recycled water projects and partnerships.

Municipalities such as the South Bay Water Recycling Municipal Utility and the Dublin San Ramon Services District also presented information on the capital investments, ratemaking mechanisms, and management of their recycled water projects. The DRA presented its perspective on pricing, cost, and ratemaking aspects of recycled water delivered to and by IOWSUs. DRA’s presentation highlighted key policy questions for the Commission. DRA questioned the standard practices of discounting recycled water (discounts are between 15% and 25% off potable water rates). DRA recommended that the Commission: 1) modify the Rate Case Plan to require sales forecast conversions in the GRC; 2) require that all Class

# Recycled Water Workshop Report

---

February 1, 2013

A and B Investor Owned Water Utilities (IOWUs) provide justification for a recycled water in their general rate cases (GRCs); and 3) set parameters for rate setting and implementation of recycled water projects via Advice Letter.

Workshop 4 presenters were The National Research Council Committee (NRCC) charged with the study of the reuse of municipal waste water, the U.S. EPA, the California Pollution Control Financing Authority, and DWR.

NRCC presented its findings on the 2012 report entitled, “Water Reuse: Potential for Expanding the Nation’s Water Supply Through Reuse of Municipal Wastewater.” The Water Reuse Report indicates there is potential for expanding the nation’s water supply through reuse of municipal wastewater to increase significantly the nation’s unplanned water resources from coastal areas. According to the report the US is disposing 12 billion gallons per day of treated wastewater into the ocean or estuaries.

The U.S. EPA presented a preview of their draft 2012 Policy Guidelines for Water Reuse.

The California Pollution Control Financing authority informed parties on financing mechanisms for low interest government funds. DWR’s presentation topics included recycled water opportunities and challenges, trends on increasing costs for non-potable projects and on indirect potable projects, planning fundamentals, and more on regulatory framework, feasibility criteria and components of recycled water; DWR noted that Senate Bill 918 includes updates to the Water Code impacting recycled water projects.

Workshop 5 presenters included the West Basin Municipal Water District, DRA, Water Board, and the DWR. The topics for workshop 5 included customer education and outreach, market potential and incentives, ratemaking and cost allocation issues associated with recycled water projects, draft policy guidelines and Minimum Criteria Requirements for recycled water project proposals, and the Integrated Regional Water Resource management planning.

# Recycled Water Workshop Report

---

February 1, 2013

## ***III. Recommended Recycled Water Policies***

DWA's recommended recycled water policy guidelines for advancing the production, distribution and use of recycled water are included in Attachment A of this report. These policy guidelines are the result of the input received through the workshop process and the comments and reply comments<sup>9</sup> that were filed by the DRA, CWA, California Water Service Company (Cal Water), and Consumer Federation of California (CFC), collectively referred to in this report as "Commenting Parties."

### **A. The Commission's Recycled Water Policy Guidelines should be Formulated within a Statewide Framework of Recycled Water Law, Policy, and Regulations**

The Commenting Parties and stakeholders participating in the workshops generally agreed that the Commission's recycled water policy guidelines should be formulated within a statewide framework of existing recycled water law, policy, and regulations, which includes, but is not limited to:

1. Water Code § 13510-13512: recycled water goals; legislative findings and declarations regarding the public interest in the development of recycled water facilities.
  - i. Water Code § 13510: "...development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future of the state."
  - ii. Water Code § 13511: "...utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state..."
  - iii. Water Code § 13512: "...undertake all possible steps to encourage the development of recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state."
2. Water Code § 13550-13557 (reasonable use of potable water; and suitable uses of potable water);
3. Water Code § 13575 -13583 (Water Recycling Act of 1991; equitable principles and discounting of recycled water/allocation of the discount among potable water customers);

---

<sup>9</sup> Comments on the draft policy guidelines were filed on November 14, 2012 and reply comments on November 30, 2012.

# Recycled Water Workshop Report

---

February 1, 2013

4. California Department of Public Health's (CDPH) California Code of Regulations (CCR) Titles 17 and 22 Water Recycling Criteria;
5. Public Utilities Code §455.1 (Procedural Requirements);
6. Public Utilities Code §1501 et seq. (Rates are fixed by the Commission at levels which assume that facilities will remain use and useful, and avoidance service duplication);
7. State Water Resources Control Board (SWRCB) statement of policy (adopted, as amended on January 22, 2013) calling for a significant increase in the use of recycled water and storm water. Included in its goals is the substitution of these local recycled water supplies as much as possible for potable water;
8. Senate Bill (SB) 918<sup>10</sup>, CDPH's upcoming criteria for groundwater recharge to be developed and adopted by December 31, 2013, and feasibility study of developing a uniform water recycling criteria for direct potable reuse by December 31, 2016; and
9. The Commission's 2010 Water Action Plan (WAP).

A copy of the Water Code Sections referenced above is provided in Attachment E of this report.

## **B. 2010 Water Action Plan and Recycled Water Policies**

Commenting Parties agreed that the recommended recycled water policy guidelines are consistent with the policy statements outlined in the Commission's WAP:

1. Promote the consideration and implementation of recycled water projects that provide cost-effective, reliable and affordable sources of water supply for IOWSU<sup>11</sup> customers and that are in the public interest. Recycled water is an important water resource necessary to meet the water demands of an increasing population. Use of recycled water reduces the need for potable water and increases available supplies. To the extent that recycled water is available, the Commission will require its use, when practicable and to the extent required by and consistent with the Water Code sections 13550-13557, as another supply source;<sup>12</sup> and

---

<sup>10</sup> SB 918 was enacted on August 26, 2010 and amended Water Code Sections 13350 and 13560.

<sup>11</sup> The use of "IOWSU" in these guidelines refers to Class A and B investor-owned water and comparably sized sewer utilities and to smaller size Commission-regulated water and sewer utilities that engage in the production and/or distribution of recycled water service.

<sup>12</sup> Water Action Plan, pg. 16

# Recycled Water Workshop Report

---

February 1, 2013

2. The production, use, and distribution of recycled water can uphold the four key principles of water utility regulation set out in the WAP:
  - i. Safe, high quality water
  - ii. Highly reliable water supplies
  - iii. Efficient use of water
  - iv. Reasonable rates and viable utilities<sup>13</sup>

## **C. Goals for the Production, Distribution, and/or Use of Recycled Water**

DWA believes that the Commission should consider the recycled water goals set by the Water Board in its recycled water policy to be applicable state-wide to the recycled water produced, distributed and/or used by the IOWSUs. As previously indicated in the report, the Water Board's recycled water policy goal is to increase recycled water over 2002 levels by at least one million afy by 2020 and by at least two million afy by 2030, and to substituting as much recycled water for potable water as possible by 2030.<sup>14</sup> At this time DWA is not specifically recommending that the Commission set a specific volumetric goal or target for the production, distribution and/or use of recycled water by the IOWSUs. Since the opportunities for IOWSUs to utilize recycled water depend largely on projects initiated and developed by local and regional public agencies beyond the Commission's jurisdiction, the setting a specific volumetric goal for the IOWSU sector does not appear reasonable. This should not lessen the obligation to encourage, within the parameters of the Commission's authority and mission, the substitution of recycled water for potable water. For the purpose of refining the Commission's role within the Water Board's goal of substituting "as much recycled water for potable water as possible by 2030," DWA believes that the adjective "possible" should be interpreted as incorporating the qualifiers where "just and reasonable" and "necessary to promote ... safety, health, comfort and convenience" (Public Utilities Code, Section 451).

The Commission can support the Water Board's recycled water goals by requiring the IOWSUs to actively pursue recycled water opportunities in their region(s), to participate in the State's IRWM planning and management process in general and in connection with recycled water projects, in particular, and to monitor recycled water project opportunities in their region. Each IOWSU should also be required to report in its respective GRC on the recycled water project opportunities in its region, if any, being

---

<sup>13</sup> Water Action Plan, pg. 2

<sup>14</sup> 1-22-13 Amended Recycled Water Policy

# Recycled Water Workshop Report

February 1, 2013

considered or undertaken, and to the extent it opts not to consider/pursue those project opportunities, to justify why not.

There currently are only five water IOWSUs that sell recycled water service to their customers: San Gabriel Valley Water Company, Suburban Water Company, San Jose Water Company, California Water Service Company, and Park Water Company. More detail information regarding both existing and proposed IOWSU recycled water projects can be found in Attachment D and Table 1 below provides the estimated amount of recycled water produced, distributed, and/or sold by the IOWSUs in 2012.

Table 1

<b>Investor-Owned Water Utility</b>	<b>2012 recycled water distributed/sold/use in one-hundred cubic feet (CCF)</b>	<b>2012 recycled water distributed/sold/use in acre-feet (AF)</b>
<b>San Gabriel Valley Water Company</b>	296,561	680
1. Rose Hills Project	642,528	1,475
2. Whittier Narrows/Rosemead		
3. Whittier Narrows/Rosemead Extension	58,952	135
<b>Suburban Water Company</b>	117,176	269
<b>San Jose Water Company</b>	736,835	1,692
<b>California Water Services</b>	2,599,768	5,968
<b>Park Water Company</b>	136,251	313
<b>Total</b>	4,588,071	10,532

Additionally, in order for the Commission to monitor the amount of recycled water being procured, produced, and/or distributed by each IOWSU, DWA recommends that

# Recycled Water Workshop Report

---

February 1, 2013

each IOWSU report annually, as part of its annual report filing to the Commission, the amount(s) of recycled water being procured, produced, and/or distributed, if any, on a monthly basis by treatment type, including the wholesale and retail price(s) and the identity of the recycled water supplier(s).

## **D. Strengthening Interagency Coordination**

Based on the information gathered through the workshop process and as already noted above, recycled water projects generally involve public and private partnerships and oversight by multiple state and federal agencies (CDPH, DWR, Water Board, and U.S. EPA). Consistent with the WAP, DWA recommends that the Commission strengthen interagency coordination in the area of recycled water to further advance the production and use of recycled water.<sup>15</sup> DWA recommends increased interagency coordination in the areas of: 1) recycled water regulations; 2) use of recycled water in regional resource planning and management; 3) public funding for recycled water projects; and 4) developments in water treatment technologies and changes in permitting requirements for recycled water projects. The Commission should also participate, as appropriate, in the development of interagency guidelines for the economic analysis for evaluating recycled water projects.

## **E. Recycled Water Quality**

All recycled water being distributed, used, and/or sold by IOWSUs must be permitted for its intended use by the appropriate State and/or Federal agencies. The U.S. EPA regulates drinking water and surface water through two Acts, the Clean Water Act (Surface Water) and the Safe Drinking Clean Water Act (potable water for human consumption). The US EPA through the Safe Drinking Water Act delegates authority to the CDPH to set the public health criteria for recycled water quality and treatment requirements which are incorporated into the waste discharge or water reclamation permits issued by the SWRCB and RWQCBs to producers and users of recycled water.

Parties agree that the Commission should exercise its concurrent jurisdiction to regulate water quality, in conjunction with the CDPH, SWRCB, RWQCBs and local public health agencies, by monitoring IOWSU compliance with applicable standards governing recycled water management and use. DWA concurs with the parties and based on general review of General Order (GO) 103-A DWA believe that the GO provides the Commission with that authority and oversight by requiring that all recycled water meet the applicable CDPH's recycled water requirements.<sup>16</sup> It also appears that GO 103-A, Appendices A and C, require IOWSUs to maintain water quality testing records and

---

<sup>15</sup> Water Action plan, pg. 8

<sup>16</sup> GO 103-A, Section II.2.A.(9).



# Recycled Water Workshop Report

---

February 1, 2013

operation and maintenance records of recycled water facilities. However, parties should confirm whether GO 103-A adequately addresses the Commission jurisdiction over recycled water quality and records retention.

## **F. Comparative Analysis of Energy Costs and Savings**

The larger energy-water nexus issues associated with the production, treatment, and conveyance of the water supplies extend beyond the scope of this Rulemaking. For the purpose of this Rulemaking, DWA recommends as part of the policy guidelines for the evaluation of recycled water projects that the IOWSUs provide an analysis of energy costs and savings associated with alternative water supplies compared against the proposed recycled water project. CWA recommends that this analysis be incorporated into the cost and benefit (economic) analysis for a specific project rather than being a standalone requirement. DWA concurs with CWA's recommendation and recommends that the comparative analysis of energy costs and savings be incorporated into the economic analysis for each proposed recycled water project. DWA however maintains the policy statement in Attachment A to highlight the importance of this issue.

Currently there is no consensus between or among industry representatives or regulators on a specific method or tool for carrying out this analysis. DWA points, however, to two relevant studies that should be considered by the IOWSUs in conducting their analyses: 1) the Pacific Institute's *Water-Energy Simulator (WESim)* and report on *the "Implications of Future Water Supply Resources for Energy Demands;"*<sup>17</sup> and 2) the *"Embedded-Energy in Water Studies"* prepared by GEI Consultants and Navigant Consulting Inc. for the Commission.<sup>18</sup> The WESim is an analytical tool for evaluating the energy and greenhouse gas (GHG) implications of water management decisions. The second study addressed the following goals:

1. "Develop a model of the functional relationship between water use in California and the energy used in the water sector that can be used in a predictive mode: Given a specific delivery requirement(s) developed from precipitation pattern information, what is the expected energy use?"<sup>19</sup>
2. "Develop a representative range of energy intensities for water energy load profiles for water agencies in California, and representative ranges of energy

---

<sup>17</sup> The report was sponsored by the WaterReuse Research Foundation, the California Energy Commission, Bureau of Reclamation and Canada Mortgage Foundation and can be found at:  
<http://www.pacinst.org/resources/wesim/report.pdf>

<sup>18</sup> The report can be found in the California Institute for Energy and Environment available on the website at  
<http://uc-ciee.org/planning-evaluation/7/339/105/nested>.

<sup>19</sup> Decision 07-12-050, Appendix B, p.2.

# Recycled Water Workshop Report

---

February 1, 2013

intensities for the various functional components of the water system in California.”<sup>20</sup>

3. “Develop a representative range of energy load profiles for water agencies in California, and representative ranges of energy load profiles for various functional components of the water system in California.”<sup>21</sup>

DWA recommends that the IOWSUs consider these studies in conducting their analyses. To the extent additional information and/or tools become available, they should make use of such information and/or tools.

## **G. Comparative Analysis of Greenhouse Gases**

Greenhouse gas (GHG) emissions issues associated with the energy used in the production, treatment, and the conveyance of water supplies extend beyond the scope of this Rulemaking. In 2005 the California Energy Commission estimated that water-related energy accounts for about 19.2% of the state’s electricity requirements and 30% of non-power plant related natural gas consumption. Furthermore, Assembly Bill (AB) 32, caps statewide GHG emission levels at the 1990 level by 2020. Thus, any reductions in water-related-energy consumption would be a positive contribution to the State’s GHG reduction emission goals set by AB 32.

For the purpose of this Rulemaking, DWA recommends in the proposed policy guidelines that the IOWSUs conduct a comparative analysis of the GHG emissions of a recycled water project and of alternative water supplies. CWA in its comments recommended that this policy guideline requirement be incorporated as part of the economic analysis for each respective recycled water project. DWA concurs with CWA and recommends that the comparative analysis of greenhouse gases be incorporated into the economic analysis for each proposed recycled water project. DWA however maintains the policy statement in Attachment A to highlight the importance of this issue.

Currently there is no general consensus on a specific method or tool for doing the GHG analysis. However, the Pacific Institute’s WESim, previously discussed, provides an analytical tool for evaluating the GHG of water management decisions which DWA recommends that the IOWSUs consider in their GHG analyses. To the extent that additional information or tools become available, the IOWSUs should make use of such information and/or tools.

---

<sup>20</sup> Decision 07-12-050, Appendix B, p.5.

<sup>21</sup> Decision 07-12-050, Appendix B, p.9.

# Recycled Water Workshop Report

---

February 1, 2013

## **H. Environmental Review for Recycled Water Projects**

Parties agreed that all Commission approved recycled water projects should have a determination of compliance with the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA) if and as required. DWA concurs with the parties.

## **I. Integrated Regional Water Resource Planning**

Recycled water is an important resource in the State's program of IRWR management. The general consensus by parties is that more integrated regional planning is needed. The issue is whether the IOWSUs should be required or encouraged to participate in the IRWR planning when embarking on a recycled water project. DWA believes that it is in both the ratepayers' and IOWSUs' interest for the IOWSUs to participate in IRWR planning to: 1) advance the State's recycled water policies and goals; 2) ensure the avoidance of recycled water service duplication; and 3) have a greater understanding of how each recycled water project(s) being considered fits within the regional water supply planning. DWA therefore recommends that the IOWSUs be required to actively participate in the State's IRWR planning.

DWA also recommends that the IOWSUs be required, when embarking on a recycled water project, to explore and take advantage of opportunities for joint recycled water projects and arrangements with other public water supply and wastewater treatment agencies. Furthermore, to the extent feasible, such activities should be compatible with applicable IRWR planning, and if practicable, each IOWSU should conduct its water supply planning for recycled water in a manner consistent with the relevant portions of the IRWR plan for its region.

DWA also recommends that the Commission in collaboration/coordination with CDPH, SWRCB, RWQCBs and other public agencies ensure the avoidance of duplication of recycled water service within the service territory of each IOWSU, consistent with Service Duplication Law in Public Utilities Code § 1501 et seq. Furthermore, the Commission should protect the IOWSU ratepayers in regional projects by ensuring that ratepayers do not assume an unjust share of the recycled water project costs when public and private partnerships are involved.

## **J. Recycled Water Technologies and Regulatory Developments**

Recycled water technologies and regulations are changing as the importance and use of recycled water increases. DWA recommends that the monitoring of changes in recycled water technologies and regulations be an area covered through the interagency coordination.

# Recycled Water Workshop Report

---

February 1, 2013

## **K. Public Funding for Recycled Water Project Costs**

Infrastructure costs for recycled water projects have been identified as the most significant barrier for the IOWSUs seeking to undertake recycled water projects. Under the current recycled water regulations the IOWSUs require a separate distribution system specifically designated for the conveyance of recycled water, which requires a substantial infrastructure investment and sometimes does not make recycled water projects cost-effective. Currently the primary source of State funding for recycled water projects is through the Water Recycling Funding Program administered by the SWRCB, which provides low-interest loans and grants to local agencies. Other funding sources include the US Bureau of Reclamation. Recycled water projects are therefore more viable or cost-effective when public and private partnerships are formed and/or when public funding is available. For this reason, DWA recommends that the Commission encourage the IOWSUs, to seek opportunities to partner with public agencies or otherwise to identify, seek and secure lower-cost public funding to cover or contribute to the cost of their recycled water projects. In addition, the Commission should support any necessary changes to the eligibility criteria of public loan and grant programs at the local, state and national governmental level to facilitate the IOWSU access to these funds for recycled water projects.

## **L. Ratemaking Treatment and Incentives for Recycled Water Projects**

The general consensus by parties to the Rulemaking is that the ratemaking treatment for recycled water projects should be done on a case-by-case basis because of the significant variability associated with: 1) recycled water project costs, 2) project funding and partnerships, and 3) customer infrastructure costs and incentives. The ratemaking treatment for recycled water projects, as used in this report, includes a determination on how the recycled water project costs should be allocated between the IOWSUs' potable and recycled water customers.

Similarly the determination on the reasonableness of the customer incentives and/or the discounting of recycled water for each project should be assessed on a case-by-case basis to fully consider all of the project costs and benefits that may result from approval of the project. Customer incentives were discussed during the fifth workshop and based on the information that was provided by West Basin, customer incentives to convert/take recycled water can extend beyond discounting of the rates for recycled water, given that customers may also need assistance with the financing of the necessary retrofits of their facilities. Therefore all of these factors should be considered in setting of the incentives and/or review of the project costs.

As far as the ratemaking treatment of utility plant associated with recycled water projects, the general consensus is that if the utility plant is funded by the IOWSU, and found just and reasonable by the Commission, it should be allowed into rate base. The

# Recycled Water Workshop Report

---

February 1, 2013

determination of whether the rate base for a recycled water project(s) should be kept separate from the company's rate base for potable water should be made when the ratemaking treatment for the project is established.

DWA in the draft policy guidelines had also recommended that the IOWSUs track in the appropriate memorandum/designated account the cost savings resulting from the replacement of potable water use by recycled water use and similarly the incremental costs and revenue requirement associated with the recycled water project that had been allocated to the pre-existing customer base.<sup>22</sup> CWA in its comments indicates that these two memorandum account items should not be part of the general policy guidelines. DWA concurs with CWA. If memorandum accounts need to be established for tracking any costs savings or incremental costs resulting from a proposed recycled water project, they should be established at the time the project is reviewed. DWA therefore has deleted these two items from the policy guidelines.

## **M. Public Education Concerning Recycled Water Use**

Customer education is a key element in gaining greater customer acceptance and use of recycled water. DWA recommends that the Commission encourage the IOWSUs to increase their public education concerning recycled water use. Specifically, DWA recommends that when an IOWSU undertakes a recycled water project, it should identify and review available consumer education materials, content and means of communication concerning recycled water available industry-wide at that time, and, where appropriate, take reasonable steps with its public agency partners, if applicable, to utilize existing resources before developing any duplicative materials that could be more costly.

Furthermore, each IOWSU should seek to take advantage of opportunities to increase its customers understanding of the financial, economic, social and environmental costs and benefits of recycled water.

## **N. Tier 3 Advice Letter Review Process for Specific Recycled Water Projects**

The opportunity to add recycled water to an IOWSU water supply portfolio is commonly an interagency undertaking in which timely responses and commitments can be required and in which many of the transactional terms and safeguards are determined outside the control of the IOWSU and the Commission. The Commission should allow IOWSU recycled water projects having a revenue impact of less than five percent of the proposing IOWSU's revenue requirement in the associated ratemaking area to be processed through a Tier 3 Advice Letter rather than an application. More details

---

<sup>22</sup> October 12, 2012, Recycled Water Policy Guidelines, item 12.d. and 12.e.

# Recycled Water Workshop Report

---

February 1, 2013

regarding the minimum criteria and eligibility requirements for these types of projects are provided in Sections IV and V of this report.

## ***IV. Recommended Minimum Criteria Requirements for Recycled Water Projects***

DWA recommends the Minimum Criteria Requirements (MCRs) for the Commission's review of recycled water projects through either a formal stand-alone application or GRC application are provided in Attachment B of this report. The MCRs for less formal Tier 3 Advice Letter (AL) process for expedited review of smaller- scale, uncomplicated projects are provided in Attachment C of this report. The recommended MCRs resulted from the input received through the workshops and the comments and reply comments that were filed by Commenting Parties in the Rulemaking on the draft criteria provided to the service list on October 12, 2012. The revisions to the MCRs and areas of contention are discussed further in the Workshop Report.

Both CWA and DRA in their comments recommend that the Commission establish one set of minimum criteria for all recycled water projects, and that the Tier 3 AL process be only the vehicle for the expedited review of "straightforward" projects meeting the minimum threshold requirements discussed below. DWA, in partial agreement with DRA and CWA, believes that the MCRs should be the same for all recycled water projects and to the extent possible. There are some noted differences, the most significant being the cost-benefit analysis requirement for projects proposed through the formal application or GRC applications which is not required for recycled water projects eligible for the Tier 3 AL process. DWA does not believe that the Commission should require a cost-benefit analysis for the smaller-scale recycled water projects. While the recommended MCRs for the review of recycled water projects are practically the same for projects that would be proposed through formal and/or GRC process and the Tier 3 AL process, DWA recommends keeping the two documents separate to eliminate any confusion between the two MCRs when projects are filed with the Commission.

### **A. Minimum Criteria Requirements for a Proposed Recycled Water Project**

The attached recommended MCRs for recycled water project proposals are intended to guide and assist the IOWSUs in the preparation of their project applications and provide more certainty/clarity as to the level of information needed for the Commission's review of these projects. The intent is not to create more stringent requirements or a burdensome review process for these projects, given that the objective is to promote and advance the production, distribution, and use of recycled water. CWA, in its comments argues that by adding new requirements for submission of information in the GRC would indirectly modify the Rate Case Plan (RCP). DWA does not believe that the proposed MCRs for the Commission's review and evaluation of recycled water projects modifies the RCP, given the proposed MCRs specifically apply to recycled water projects

# Recycled Water Workshop Report

---

February 1, 2013

only and do not apply to other capital projects. For this reason DWA does not believe that the RCP needs to be modified.

DWA appreciates the assistance provided by CWA and DRA in re-organizing and editing the initial drafts of the MCRs for consistency. DWA has followed the format proposed by CWA and DRA and the following section describes changes or additions DWA has made to the MCRs based on the comments received.

## Background Section for the Proposed Recycled Water Project

This section of the MCRs has been rearranged and reorganized and edited by DRA and CWA. DWA concurs with the parties suggested edits and organization as presented in Attachment B and C.

DWA concurs with CWA's and DRA's suggested edits to the background section in the MCRs and Tier 3 AL template and has incorporated it in the revised documents. CWA also suggests adding to the Tier 3 AL template (Section II, 1.g.) a statement on the rationale for requesting expedited review and approval of the proposed recycled water project. DWA concurs with the addition and has incorporated it into the requirements.

## Need for the Proposed Recycled Water Project<sup>23</sup>

DWA generally concurs with DRA's and CWA's reorganization and added MCRs to this section. DWA in its draft MCRs and Tier 3 AL template had included an information requirement on the IOWSUs conservation/demand- side management. However, after further consideration of this MCR, DWA does not see the added benefit or value of this MCR, nor of the leak detection information requirement for the purpose of evaluating recycled water project proposals. While conservation/demand-side management play a key role in reducing the IOWSUs' overall system demand and thus the need for additional supply, recycled water has other attributes, such as added system reliability, that conservation/demand-side management programs do not provide, and therefore would be difficult to draw a direct comparison between the two. In addition, DWA agrees with CWA and the IOWUs that Senate Bill 7x7 already requires them to reduce urban per capita water use by 20% by 2020, and that the IOWUs' water conservation efforts and budgets are reviewed and litigated in their respective proceedings. For these reasons, DWA does not recommend including those particular MCRs.

---

<sup>23</sup> Section I.2. in MCRs and Section II.2. in Tier 3 AL template.

# Recycled Water Workshop Report

---

February 1, 2013

## General Structure of Proposed Project Transaction<sup>24</sup>

DRA proposes adding to subsection 3.a. two additional information requirements: 1) to include a description of partnerships to the information requested concerning contracting parties; and 2) information on other incentives for recycled water use. DWA finds DRA's suggestions reasonable and therefore has added them to the MCRs.

DRA also requests adding to subsection 3.b. language that would require the IOWSUs to justify the reasonableness of the key terms of the foregoing contracts entered into. DWA believes that a review of the reasonableness of the key terms of the contract(s) will be part of the existing review for each proposed IOWSU's recycled water project proposal. This added language therefore is not needed.

DRA also requests adding the following language to two new subsections 3.c. and 3.d. to the General Structure of the Proposed Project MCR:

"3.c. Additional project specifics related to partnering entities, including:

- Justification for partnering with the entity selected, including a summary of other partnering options explored.
- Partnering entities' timeline and current status – include any Memorandum of Understanding's that may be in place.
- Water Purchase Agreement or other contract-related protections, including protections for water quality, guaranteed supply, future cost increases, stranded costs in the event of breach of contract.
- Funding provided by partnering entity.
- Distribution of responsibility for partnership – who builds, owns, and operates? Who pays for the customer retrofits?

3.d. Project overview summary of the proposed project to be shown in Appendix A."

---

<sup>24</sup> Section I.3. in MCRs and Section II.3. in Tier 3 AL template.



# Recycled Water Workshop Report

---

February 1, 2013

DWA agrees with most of DRA's proposed information requirements for 3.c. given that they provide important information regarding the timelines and the status of the agreement(s) and ratepayer protections in the event the project is abandoned by the partnering entity, as well as information on construction, ownership and operational responsibilities. DWA does not believe that an IOWSU needs to provide additional information to justify the partnership, given that this would be part of the reasonableness review of IOWSUS' proposed contract and/or partnership agreement(s). For this reason DWA excludes this additional information requirement, the first bullet in 3.c above. DWA also agrees with CWA's comments that additional requirement on the funding being provided by the partnership (last bullet in 3.c. above) should be captured in the cost-sharing and cost-allocation information requested in subsection 3.a. For this reason DWA does not accept this additional information requirement.

For subsection 3.d. above, DRA proposes to add a summary table of the proposed project's key information. DWA agrees that a summary table would be useful to have and therefore has accepted this addition.

## Project Cost-Benefit Analysis<sup>25</sup>

During the 2nd set of workshops, the Economic Analysis Task Force (EATF) presented information on its study *"Guidelines for Preparing Economic Analysis for Water Recycling Projects."* This study provides detailed guidance for conducting economic (cost-benefit) and financial analyses for recycled water projects. The study provides two methods for analyzing the desirability and feasibility of recycled water projects: 1) the cost-benefit analysis considers the project benefits and costs for the society as a whole; and 2) the financial analysis evaluates whether the project can generate enough revenues to pay back the financial costs incurred in the construction of the project and its operation. The cost-benefit analysis would be used by a recycle water project proponent to determine whether the proposed project is worthwhile investment and accounts for all the benefits and costs regardless of who is affected, and allows for a comparison between alternatives. As indicated in the study, the economic analysis differs from the financial analysis in that the economic analysis is the primary step in determining whether the project is economically feasible, and thus a worthwhile investment. A complete copy of the study can be found at US EPA Region 9, Water Recycling and

---

<sup>25</sup> Section I.4. in MCRs

# Recycled Water Workshop Report

---

February 1, 2013

Reuse: The Environmental Benefits under Additional Resources.<sup>26</sup> DWA recommends that the IOWSUs use the guidelines and criteria, to the extent applicable, for the preparation of the cost-benefit analysis when proposing the construction of new recycled water projects. If it is an existing recycled water project, DWA recommends that IOWSUs prepare a cost-effectiveness evaluation by comparing the price of the recycled water from the proposed project to the next least-cost alternative water source of potable water supply.

DRA and CWA have both provided revisions to the cost-benefit analysis MCR. DRA recommends that the cost-benefit analysis focus more specifically on measuring the cost-effectiveness of the project from a ratepayer perspective in the service area where the project is being proposed, whereas CWA's edits are more consistent with the cost-benefit analysis DWA proposed in the draft MCRs which is for a more inclusive analysis that would consider costs and benefits of the project from a societal perspective. After reviewing DRA's proposed analysis, DWA believes that having both analyses would be useful to the Commission in evaluating the proposed recycled water project. In this way the costs and benefits can be considered from both a societal and the ratepayer perspective where the project is being proposed. DWA incorporates DRA's recommended edits in this MCR, except for the condition that the recycled water project be compared to the cost of securing the next least-cost alternative source only if the IOWSU's Urban Water Management Plan (UWMP) demonstrates a need for the additional supply in the UWMP's timeframe. DWA believes that project's comparison to the next least-cost alternative source should be done for all projects irrespective of whether it is part of the IOWSU's UWMP or not.

For recycled water projects eligible for review through the Tier 3 AL process, DWA does not recommend requiring a full cost-benefit analysis, given the smaller size of the projects. However, DWA recommends that IOWSU do a cost-effectiveness evaluation of the proposed projects by comparing the price of the recycled water from the proposed project to the next least-cost alternative water source of potable water supply. DWA therefore has included this MCR into Section II.4. of the Tier 3 AL template.

---

<sup>26</sup> University of California Davis, Guidelines for Preparing Economic Analysis for Water Recycling Projects, April 2011, Available at the US EPA Region 9 website at: <http://www.epa.gov/region9/water/recycling/>

# Recycled Water Workshop Report

---

February 1, 2013

## Supply Potential<sup>27</sup>

DWA concurs with DRA's and CWA's reorganization and modification to this section of the MCRs. The language proposed by DRA and CWA for this section is essentially the same. The only difference is that DRA requests adding language to subsection 5.b. that would require the IOWSUs to justify the scale and size of the proposed project for the anticipated need. DWA believes that the determination of whether the scale and size is justified for the need would be part of the project's review and approval process. For this reason DWA does not accept DRA's proposed additional language this section.

## Incentives<sup>28</sup>

DWA concurs with DRA's and CWA's reorganization and modifications to this section and criteria and therefore accepts these changes.

## Due Diligence on Recycled Water Supply<sup>29</sup>

DWA concurs with DRA's and CWA's reorganization of this section. DRA proposes adding language that requires the IOWSUs to provide information on wastewater treatment facilities located within and adjacent to the IOWSU's service area in cases where an IWRP does not exist for the region. DRA also proposes adding information on the efforts made by an IOWSU to partner with the owners of those facilities. DWA supports the first part of DRA's proposed language addition, given that this would be useful information for the Commission in evaluating the merits of a proposed project. DWA does not support requiring the IOWSUs to provide additional information on the efforts made to partner with the owners of those facilities. DWA believes that the IOWSUs should have the discretion to select projects that are in their best interest. The merits of the projects and/or partnerships will be evaluated by the Commission prior to approval. For this reason, DWA accepts only the first part of DRA's added language suggestion.

---

<sup>27</sup> Section I.5. MCRs and Section II.5. Tier 3 AL template.

<sup>28</sup> Section I.6. MCRs and Section II.6. Tier 3 AL template.

<sup>29</sup> Section I.7. MCRs and Section II.7. Tier 3 AL template.

# Recycled Water Workshop Report

---

February 1, 2013

## Project Costs<sup>30</sup>

DWA concurs with CWA's and DRA's reorganization of this section. The changes proposed by CWA and DRA to for this MCR are consistent with the draft language proposed by DWA in draft MRCs. DWA accepts the proposed changes to this section.

## Revenue Requirement, Rates and Rate Design<sup>31</sup>

CWA's and DRA's proposed modifications to this section are consistent with DWA's draft MCRs. DWA accepts the corrections made by CWA to the revenue requirement subsection 9.b. For subsection 9.c., DWA agrees with CWA's inclusion of the wholesale and retail price information of recycled water in the IOWSU's service area or district, which is consistent with DWA's draft MCRs. For subsections 9.d. and 9.e., DWA supports CWA's language modification to these requirements, given that the rate design and proposed recycled water rates would be applicable to new recycled water projects. DWA therefore accepts CWA's suggested edits to subsections 9.d. and 9.e.

DRA and CWA also recommend adding to this section a requirement for the IOWSU to provide information on the rate impacts on potable customers that would result from implementation of the recycled water project and providing recycled water to existing or new customers. DWA agrees that this information is important for analyzing the costs and rate implications on the IOWSUs' existing customer base. DWA reviewed DRA's and CWA's suggested language and concurs and agrees with CWA's suggested language with a minor modification, making it clear that the estimated rate impacts be for the service area where the recycled water project is being proposed.

## Section 10. Environmental Review, Permits and Certifications

CWA's and DRA's suggested edits to this section are consistent with DWA's proposed minimum requirements for this section and therefore have been incorporated in the revised version of the minimum requirements. In addition, CWA recommends adding an information requirement on the limitations set by applicable permits that would affect the proposed recycled water project. DWA concurs with this addition and has added this requirement to this section.

---

<sup>30</sup> Section I.8. MCRs and Section II.8. Tier 3 AL template.

<sup>31</sup> Section I.9. MCRs and Section II.9. Tier 3 AL template.

# Recycled Water Workshop Report

---

February 1, 2013

## ***V. Recommended Criteria Requirements for Recycled Water Projects Proposed Through the Tier 3 Advice Letter Process***

As indicated in the policy guidelines, a Tier 3 AL process is recommended for the review of recycled water projects meeting the following criteria:

1. The proposed recycled water project has a revenue impact of less than 5% of the proposing IOWSU's revenue requirement in the associated ratemaking area;
2. The proposed recycled water project does not require National Environmental Protection Act ("NEPA") or California Environmental Quality Act (CEQA) review and/or the lead agency has completed and certified CEQA review for the proposed Project; and
3. The proposed recycled water project does not involve direct potable reuse as defined by Water Code Sections 13560 (a) et seq.<sup>32</sup>

DWA in its draft Tier 3 AL template recommended that recycled water projects that require advanced treatment, (treatment meeting the reverse osmosis and advanced oxidation process as defined in the Title 22, California Code of Regulations, Section 60301.100 (a)) not be eligible for review via the Tier 3 AL process. After further consideration of CWA's comments, DWA agrees with CWA that recycled water projects requiring advanced treatment should not be excluded from the Tier 3 AL process as long as they meet the three criteria above. DWA has modified this requirement.

In addition, based on the input and comments received on the draft MCRs for recycled water projects eligible for review through the Tier 3 AL process, DWA has revised the criteria to match the MCRs for recycled water projects proposed through formal or GRC applications. The main difference remaining between the two sets of criteria is that no cost-benefit analysis would be required for projects that are reviewed through the Tier 3 AL process given the scale of the projects. Instead a cost-effectiveness evaluation by comparing the price of the recycled water from the proposed project to the next least-cost alternative water source of potable water supply.

---

<sup>32</sup> Water Code Section 13560 ( c ), Chapter 7.3. Direct and Indirect Potable Reuse: "Direct potable reuse" means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant

# Recycled Water Workshop Report

---

**February 1, 2013**

CWA and DRA recommend combining the two sets of criteria into one. As previously indicated, the two sets of MCRs are practically the same, but DWA recommends keeping them separate to avoid any confusion between the two MRCs.

**Attachment A**

***Recycled Water Policy Guidelines***

---

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

### *Recycled Water Policy Guidelines*

---

1. The California Public Utilities Commission's ("Commission" or "CPUC") Recycled Water Policy Guidelines have been formulated within a statewide framework of recycled water law, policy, and regulation, the elements of which include, but not limited to:
  - a. Water Code § 13510-13512 (Recycled Water goals; Legislative findings and declarations regarding the public interest in the development of recycled water facilities);
    - i. Water Code § 13510: "...development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future of the state."
    - ii. Water Code § 13511: "...utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state..."
    - iii. Water Code § 13512: "...undertake all possible steps to encourage the development of recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state."
  - b. Water Code § 13550-13557 (reasonable use of potable water; suitable uses for recycled water), ;
  - c. Water Code § 13575 -13583 (Water Recycling Act of 1991; equitable principles and discounting of recycled water/allocation of the discount among potable water customers); CWA also referenced §13576(1)
  - d. California Department of Public Health's (CDPH) California Code of Regulations (CCR) Titles 17 and 22 Water Recycling Criteria;
  - e. Public Utilities Code §455.1 (Procedural Requirements);
  - f. Public Utilities Code §1501 et seq. (Rates are fixed by the Commission at levels which assume that facilities will remain use and useful and service duplication);



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

- g. State Water Resources Control Board (SWRCB) statement of policy (adopted, amended January 22, 2013, as may be modified from time to time) calling for a significant increase in the use of recycled water and storm water. Included in its goals is the substitution of these local recycled water supplies as much as possible for potable water;
  - h. Senate Bill (SB) 918<sup>1</sup>, CDPH's upcoming criteria for groundwater recharge to be developed and adopted by December 31, 2013, and feasibility study of developing a uniform water recycling criteria for direct potable reuse by December 31, 2016; and
  - i. The Commission's 2010 Water Action Plan (WAP).
- 2. Consistent with the Commission's WAP, the Commission shall promote the consideration and implementation of recycled water projects that provide cost-effective, reliable and affordable sources of water supply for Investor-Owned Water and Sewer Utility ("IOWSU")<sup>2</sup> customers and that are in the public interest.
  - a. "Recycled water is an important water resource necessary to meet the water demands of an increasing population. Use of recycled water reduces the need for potable water and increases available supplies. To the extent that recycled water is available, the CPUC will require its use, when practicable and to the extent required by and consistent with the Water Code sections 13550-13557, as another supply source".<sup>3</sup>
  - b. The Commission recognizes that the production, use and distribution of recycled water can honor the four key principles of water utility regulation set out in the 2010 Water Action Plan:
    - i. Safe, high quality water

---

<sup>1</sup> SB 918 was enacted on August 26, 2010 and amended Water Code Sections 13350 and 13560.

<sup>2</sup> The use of "IOWSU" in these guidelines refers to Class A investor-owned water and comparably sized sewer utilities and also to smaller size Commission-regulated water and sewer utilities that engage in the production and/or distribution of recycled water service.

<sup>3</sup> Water Action Plan, pg. 16

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

- ii. Highly reliable water supplies
  - iii. Efficient use of water
  - iv. Reasonable rates and viable utilities<sup>4</sup>
- c. The goal of the Commission is to increase the production, distribution and use of recycled water where such increase is: cost effective; benefits justify the costs;<sup>5</sup> and/or otherwise in the public interest.
- d. Setting a mandatory volume goal of recycled water use within IOWSU service areas does not appear appropriate at this time in light of the number of variables beyond the control of the IOWSU in procuring recycled water supplies and/or recycled water project opportunities; IOWSU, however should actively pursue recycled water opportunities in its region(s), and actively participate in the State's Integrated Resource Management planning and monitor recycled water project opportunities in its region(s).
- i. Each IOWSU should report in its respective General Rate Case on the recycled water opportunities in its region, if any, being considered or undertaken, and to the extent it opts not to consider/pursue those project opportunities, it should justify why not.
  - ii. In order for the Commission to monitor the amount of recycled water being procured and distributed by the IOWSUs, each IOWSU should report annually, as part of its annual report to the Commission, the amount(s) of recycled water purchased, produced, and/or distributed, if any, on a monthly basis by treatment type, including

---

<sup>4</sup> Water Action Plan, pg. 2

<sup>5</sup> A cost-benefit analysis for recycled water projects should consider relevant non-monetized and/or non-economic costs and benefits, such as improved water supply reliability, reduced dependence on imported water, comparative energy costs and/or savings, comparative increases or reductions in greenhouse gases, other associated environmental impacts/benefits.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

the wholesale and retail price(s) and the identity of recycled water supplier(s).

3. Consistent with the 2010 Water Action Plan<sup>6</sup> the Commission will strengthen interagency coordination and working relations with the CDPH, Department of Water and Resources (DWR), SWRCB and Regional Water Quality Control Boards (RWQCBs).
4. The Commission shall continue to exercise its concurrent jurisdiction to regulate water quality, in conjunction with the CDPH, SWRCB, RWQCBs and local public health agencies, by monitoring IOWSU compliance with applicable standards governing recycled water management and use.
5. In recognition of the fact that energy costs are embedded in water service, the Commission should encourage the IOWSUs to consider the comparative energy costs and/or savings associated with alternative water supply sources when evaluating the recycled water projects.
6. In recognition of the fact that aspects of water service contribute to the occurrence of greenhouse gases, and the State's commitment under Assembly Bill 32 to reduce those gases, the Commission should encourage IOWSUs to estimate and consider the comparative increase or reduction in greenhouse gases associated with alternative water supply sources when evaluating the advisability of proposing a recycled water project.
7. All Commission approved recycled water projects should have a determination of compliance with the California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA), if required.
8. The Commission will participate, where appropriate, in efforts to develop interagency guidance for economic analysis for the evaluation of recycled water projects.

---

<sup>6</sup> Water Action plan, pg. 8

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

9. The Commission should require active participation by each IOWSU to in integrated regional water resource planning, through public-private interagency cooperation and collaboration, where furtherance of sound water supply and water quality management principles.
  - a. The Commission should require IOWSUs, when embarking on a recycled water project, to explore and take advantage of opportunities for joint recycled water projects and arrangements with other water supply and waste treatment agencies. To the extent feasible, such activities should be compatible with applicable IRWRP planning.
  - b. The Commission should promote the avoidance of duplication of recycled water service within the tariff territory of an IOWSU, consistent with Public Utilities Code§ 1501 et seq., and in the public interest.
  - c. To the extent practicable, each IOWSU should conduct its water supply planning for recycled water in a manner consistent with the relevant portions of the IRWRP for its region.
  - d. The Commission is committed to protecting the IOWSU ratepayers in regional projects such that they should not be required to assume an unjust share of the associated costs of such projects
10. Each IOWSU, through associations or otherwise, should keep abreast of technological and regulatory developments concerning recycled water to the extent prudent for water supply planning and development.
11. IOWSUs, through collaboration with their public agency partners or otherwise should identify, seek and secure lower-cost public funding to cover the cost of their recycled water projects.
  - a. The Commission should support changes in the eligibility criteria of public loan and grant programs at the local, state and national governmental level that facilitate IOWSU access to lower-cost funding for recycled water projects.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

12. IOWSU's recycled water project proposals should include a full analysis of the rate impacts on the allocation of fixed and volumetric costs between potable and recycled water customers in the service area where the recycled water project is proposed.
  - a. As authorized by Water Code § 13580.8(d) the discounting of recycled water rates can be an appropriate economic incentive as long as such an incentive is needed/justified to use recycled or nonpotable water in place of potable water.
  - b. Reasonable costs associated with approved recycled water projects should be recoverable and equitably allocated among customer classes.
  - c. Utility plant associated with recycled water projects that are funded by the IOWSUs, and found just and reasonable by the Commission should be allowed into rate base. The determination of whether the rate base for a recycled water project(s) should be kept separate from the company's rate base for potable water should be made when the ratemaking treatment for the project is established.
  - d. Given that the variability in recycled water project costs and pricing of recycled water are project specific, the rates and ratemaking treatment for recycled water projects should be done in a case-by-case basis.
13. The Commission encourages increased public education concerning recycled water use.
  - a. Each IOWSU should identify and review available consumer education materials, content and means of communication concerning recycled water, and, where appropriate, take reasonable steps with its public agency partners, if applicable, to utilize those existing resources before developing internally any duplicative materials that could be more costly.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment A

- b. The Commission encourages each IOWSU to seek and take advantage of opportunities to increase its customers understanding of the financial, economic, social and environmental costs and benefits of recycled water.
- 14. Recognizing that an opportunity to add recycled water to an IOWSU water supply portfolio commonly is an interagency undertaking in which timely responses and commitments can be required and in which many of the transactional terms and safeguards are determined outside the control of the IOWSU and the Commission, the Commission should allow IOWSU recycled water projects having a revenue impact of less than five percent of the proposing IOWSU's revenue requirement in the associated ratemaking area to be processed through a Tier 3 Advice Letter rather than an application.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

### *Minimum Criteria Requirements for a Proposed Recycled Water Project*

---

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

### ***Minimum Criteria Requirements for a Proposed Recycled Water Project***

---

These minimum criteria requirements for recycled water projects are to be submitted by an Investor-Owned Water and Sewer Utility (“IOWSU”)<sup>1</sup> in the preparation and submission of a recycled water project (“Project”) for Commission approval in a General Rate Case application or a stand-alone application. IOWSU should provide a thorough showing in support of the prudence of the project and the reasonableness of the associated costs.<sup>2</sup> The applicant must provide, at a minimum, a detailed showing on the following:

1. Background of the Proposed Recycled Water Project
  - a. General Information, including Project name and description (e.g., proposed technology, whether for direct potable, indirect potable or non-potable reuse, whether part of an existing recycled water system, etc.);
  - b. Past history, present status projected timeline of Project development,
  - c. Status of any related projects;
  - d. Location of the proposed Project (include city/district/county and a summary description of the geographical and hydrological conditions) and applicable Integrated Regional Water Management (“IRWM”) planning area;
    - i. Confirmation that the wastewater treatment plant providing recycled water for Project is fully permitted by the county, state and federal agencies as required by laws and regulations.
    - ii. Name(s) and description of relationship with partnering entities, if any.
2. Need for the Proposed Recycled Water Project
  - a. The current cost, availability and demand for potable and recycled water supplies in the service area of the proposed Project;
  - b. Potential customer demand for the proposed Project’s recycled water supply by prospective customer;

---

<sup>1</sup> The use of “IOWSU” in these criteria refers to Class A investor-owned water and comparable size sewer utilities and to smaller size Commission regulated water and sewer utilities that are engaging in the production, distribution or use of recycled water.

<sup>2</sup> The Tier 3 Advice Letter Process has additional, more stringent requirements because that expedited process is intended for relatively straightforward, uncomplicated and cost limited recycled water projects.



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

- c. Potential displacement of current potable delivery;
  - d. The projected impact of the proposed Project on the recycled water supplies available in the applicable Integrated Regional Water Resources Plan (“IRWRP”).
- 3. General Structure of the Proposed Project Transaction
  - a. Summary and explanation of key terms and conditions of the proposed Project contracts, including the following, as applicable:
    - i. Partnerships and Contracting parties;
    - ii. Proposed cost-sharing and cost allocation;
    - iii. Proposed price discounting; and
    - iv. Proposed escalation rates.
  - b. Explanation of how the foregoing contracts will benefit the participating customers, the overall customer base and the company’s supply portfolio.
  - c. Additional project specifics related to partnering entities, including:
    - i. Partnering entities’ timeline and current status – include any Memorandum of Understanding that may be in place.
    - ii. Water Purchase Agreement or other contract-related protections, including protections for water quality, guaranteed supply, future cost increases, stranded costs in the event of breach of contract.
    - iii. Funding provided by partnering entity.
    - iv. Distribution of responsibility for partnership – who builds, owns, and operates the distribution facilities? Who pays for the customer’s facilities retrofits?
  - d. Project overview summary of the proposed project to be shown in Table 1.
- 4. Project Cost-Benefit Analysis
  - a. Provide the cost-benefit analysis for the Project, including consideration of all non-monetized, non-quantifiable factors (e.g. environmental, supply reliability, social benefits, etc.)
    - i. Estimated impacts on energy usage (both demand and energy consumption)

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

- ii. Estimated Greenhouse Gas Reductions
  - b. The cost-benefit analysis should also specifically include:
    - i. A comparison of project costs against securing the next least-cost alternative source of potable water supply;
    - ii. The estimated avoided costs of potable water treatment and distribution resulting from implementation of the proposed Project;
  - c. The direct benefits that the Project provides to the customers in the service area (e.g., supply reliability, system redundancy, etc.), and a description of how these benefits or factors are relevant to this specific service area (e.g., scarcity of water within this region, lack of existing system redundancy, etc.).
5. Supply Potential
- a. Source of recycled water supply and projected availability.
6. Incentives
- a. Marketing incentives/rate discounts, if any, to incentivize the use of recycled water produced by the proposed Project (include both pricing and non-pricing alternatives; wholesaler discounts and IOWSU-planned incentives, e.g. assistance with customer retrofitting costs); and
  - b. Describe the factors used/considered to establish the proposed incentives.
7. Due Diligence on Recycled Water supply
- a. Information on existing and planned recycled water operations in the Project's Integrated Water Resource Planning area.
  - b. Efforts made by the IOWSU or its public partner(s) to seek public funds in grants or low-interest loans, if at all. Describe the status and anticipated impact of such funds on Project costs.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

### 8. Project Costs

- a. Breakdown of utility plant required for the proposed Project, including the amount of the proposed Project's utility plant that is being proposed to be added to the IOWSU rate base;
- b. Breakdown of the proposed Project's utility plant, if any, that will be funded by public monies;
- c. Identify and quantify one-time and on-going expenses needed for the Project to be borne by the IOWSU (e.g., operation and maintenance expenses, administrative and general expenses, etc.); and
- d. Amount and type of contributions to the Project, if any (e.g., treatment plant upgrades, onsite retrofits, etc.).

### 9. Revenue Requirement, Rates, and Rate Design

- a. Total rate base increase associated with the Proposed Project;
- b. Total increase in revenue requirement from the proposed Project;
  - i. Net revenue requirement increase needed to cover the additional Utility Plant for the Project; and
  - ii. Revenue requirement resulting from 1) added rate base, and 2) expense increases (e.g., depreciation expense/property taxes/marketing incentives/operation & maintenance/administrative and general/etc.)
- c. Existing recycled water rates in the applicable service area
  - i. Wholesale purchase price of recycled water in AF/CCF available in the applicable service area or district where the IOWSU is not the producer of recycled water;
  - ii. Existing retail price in AF/CCF for IOWSU-produced or conveyed recycled water in the applicable service area;

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

- d. Recycled water rates that will result from the addition of the proposed Project; and
- e. Provide an explanation and justification for the rate design of the proposed recycled water rates.
- f. Estimated impact of expanding the recycled water services to new or existing customers on the allocation of fixed and volumetric costs across potable and recycled water customers in the service area where the recycled water project is proposed.

### 10. Environmental Review, Permits and Certifications

- a. Demonstrate Project Compliance with California Environmental Quality Act ("CEQA") and the National Environmental Protection Act ("NEPA"), to the extent applicable; and
- b. Identification and status of all of the necessary permits/certifications from the relevant regulatory agencies with jurisdiction over the proposed Project (e.g. Regional Water Quality Control Board, California Department of Public Health, etc.)
- c. Specify any limitations set by applicable permit that may affect the proposed Project.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment B

**Table 1**

<b>Project Name:</b>		
<b>1</b>	Location (City, Hydrologic Region, and IRWMP if any)	
<b>2</b>	Additional utility plant required for Project and the amount proposed to be added to rate base	
<b>3</b>	Total amount of recycled water to be produced and/or conveyed by the Project in AF or CCF per Yr	
<b>4</b>	Expected Project start and completion date	
<b>5</b>	Projected start date for recycled water conveyance to customers	
<b>6</b>	Lead agency for NEPA / CEQA review and approval and status of NEPA / CEQA review	
<b>7</b>	Source and wholesale price of recycled water, if applicable	
<b>8</b>	Proposed retail price of recycled water	
<b>9</b>	Public and/or private grants/loans pursued by project proponent, and/or project partners	
<b>10</b>	Status of any grant/loan funding applications	
<b>11</b>	Note Project affiliations with one or more DWR IRWM planning entities	
<b>12</b>	Status of any applicable permits	

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

*Tier 3 Advice Letter Template for a  
Proposed Recycled Water Project*

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

### *Tier 3 Advice Letter Template for a Proposed Recycled Water Project*

#### **I. Purpose and Process – Eligibility Criteria**

This Tier 3 Advice Letter process for recycled water projects is intended for the review and approval of relatively, straightforward, uncomplicated and cost limited recycled water projects (“Project”) that meet the criteria set-forth in Decision D. XXX-XXX, which include the following:<sup>1</sup>

1. The proposed Project has a revenue impact of less than %5 of the proposing Investor Owned Water and Sewer Utility’s IOWSU’s revenue requirement in the associated ratemaking area
2. The proposed Project does not require National Environmental Protection Act (“NEPA”) or California Environmental Quality Act (CEQA) review and/or the lead agency has completed and certified NEPA / CEQA review for the proposed Project; and
3. The proposed Project does not require direct potable reuse as defined by Water Code Sections 13560 et. seq.<sup>2</sup>

#### **II. Tier 3 Advice Letter Template**

1. Background of the Proposed Recycled Water Project
  - a. General Information, including Project name and description (e.g. proposed technology, whether for indirect potable or non-potable reuse, etc., whether part of an existing recycled water system, etc.);
  - b. Past history, present status and projected timeline of Project development,

---

<sup>1</sup> The use of “IOWSU” in these criteria refers to Class A investor-owned water and comparable size sewer utilities and to smaller size Commission regulated water and sewer utilities that are engaging in the production, distribution or use of recycled water.

<sup>2</sup> Chapter 7.3. Direct and Indirect Potable Reuse Section 13560 (c ) “Direct potable reuse” means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

- c. Status of any related projects;
  - d. Location of the proposed Project (include city/district /county and a summary description of the geographical and hydrological conditions) and applicable Integrated Regional Water Management (“IRWM”) planning area;
    - i. Confirmation that the wastewater treatment plant providing recycled water for the proposed Project is fully permitted by the county, state and federal agencies as required by laws and regulations.
    - ii. Name(s) and description of relationship(s) with partnering entities, if any.
  - e. The rationale for requesting expedited review and approval of the proposed Project by Tier 3 Advice Letter.
2. Need for the Proposed Recycled Water Project
- a. The current cost, availability and demand for potable and recycled water supplies in the service area of the proposed Project;
  - b. Potential customer demand for the proposed Project’s recycled water supply by prospective customer;
  - c. Potential displacement of current potable delivery;
  - d. The projected impact of the proposed Project on the recycled water supplies available in the applicable Integrated Regional Water Resources Plan (IRWRP).
3. General Structure of Proposed Project Transaction
- a. Summary and explanation of key terms and conditions of the proposed Project contracts, including the following, as applicable:
    - i. Partnerships and Contracting parties;
    - ii. Proposed cost-sharing and cost-allocation;
    - iii. Proposed price discounting; and



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

- iv. Proposed escalation rates;
  - b. Explanation of how the foregoing contracts will benefit the participating customers, the overall customer base and the company's supply portfolio.
  - c. Additional project specifics related to partnering entities, including:
    - i. Partnering entities' timeline and current status – include any Memorandum of Understanding that may be in place.
    - ii. Water Purchase Agreement or other contract-related protections, including protections for water quality, guaranteed supply, future cost increases, stranded costs in the event of breach of contract.
    - iii. Funding provided by partnering entity;
    - iv. Distribution of responsibility for partnership – who builds, owns, and operates the distribution facilities? Who pays for the customer's facilities retrofits?
  - d. Project overview summary of the proposed project to be shown in Table 1.
4. Project Cost Effectiveness
- a. Describe the cost-effectiveness of the Project, including a comparison of Project costs against securing the next least-cost alternative source of potable water supply.
5. Supply Potential
- a. Source of recycled water supply and projected availability; and
6. Incentives
- a. Marketing incentives/rate discounts, if any, to incentivize the use of recycled water produced by the proposed Project (include both pricing and non-pricing alternatives; wholesaler discounts and IOWSU-planned incentives, e.g. assistance with customer retrofitting costs); and

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

- b. Describe the factors used/considered to establish the proposed incentives.

### 7. Due Diligence on Recycled Water Supply

- a. Information on existing and planned recycled water operations in the Project's Integrated Water Resource Planning area.
- b. Efforts made by the IOWSU or its public partner(s) to seek public grants or low-interest loans, if at all. Describe the status and anticipated impact of such funds on Project costs.

### 8. Project Cost

- a. Breakdown of utility plant required for the proposed Project, including the amount of the proposed Project's utility plant that is being proposed to be added to the IOWSU rate base;
- b. Breakdown of the proposed Project's utility plant, if any, that will be funded by public monies;
- c. Cost sharing/cost allocation across Project partners;
- d. Identify and quantify one-time and on-going expenses needed for the Project to be borne by the IOWSU (e.g., operation and maintenance expenses, administrative, and general expenses, etc.); and
- e. Amount and type of contributions to the Project, if any (e.g., treatment plant upgrades, on-site retrofits, etc.).

### 9. Revenue Requirement, Rates and Rate Design

- a. Total rate base increase associated with the Proposed Project;
- b. Total increase in revenue requirement from the proposed Project;
  - i. Net revenue requirement increase needed to cover the

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment C

additional Utility Plant for the Project; and

- ii. Revenue requirement resulting from 1) added rate base, and 2) expense increases (e.g., depreciation expense/property taxes/marketing incentives/operation & maintenance/administrative and general/etc.)
- c. Existing recycled water rates in the applicable service area;
  - i. Wholesale purchase price of recycled water in AF/CCF available in the applicable service area or district where the IOWSU is not the producer of recycled water
  - ii. Existing retail price in AF/CCF for IOWSU-produced or conveyed recycled water in the applicable service area
- d. Recycled water rates that will result from the addition of the proposed Project; and
- e. Provide an explanation and justification for the rate design of the proposed recycled water rates.
- f. Estimated impact of expanding the recycled water services to new or existing customers on the allocation of fixed and volumetric costs across potable and recycled water customers in the service area where the recycled water project is proposed.

## 10. Environmental Review, Permits and Certifications

- a. Demonstrate Project compliance with the California Environmental Quality Act ("CEQA") and the National Environmental Protection Act ("NEPA"), to the extent applicable; and
- b. Identification and status of all of the necessary permits/certifications from the relevant regulatory agencies with jurisdiction over the proposed Project (e.g. Regional Water Quality Control Board, California Department of Public Health, etc.).
- c. Specify any limitations set by applicable permit that may affect the proposed Project.

# Recycled Water Workshop Report

February 1, 2013

## Attachment C

**Table 1**

<b>Project Name:</b>		
<b>1</b>	Location (City, Hydrologic Region, and IRWMP if any)	
<b>2</b>	Additional utility plant required for Project and the amount proposed to be added to rate base	
<b>3</b>	Total amount of recycled water to be produced and/or conveyed by the Project in AF or CCF per Yr	
<b>4</b>	Expected Project start and completion date	
<b>5</b>	Projected start date for recycled water conveyance to customers	
<b>6</b>	Lead agency for NEPA / CEQA review and approval and status of NEPA / CEQA review	
<b>7</b>	Source and wholesale price of recycled water, if applicable	
<b>8</b>	Proposed retail price of recycled water	
<b>9</b>	Public and/or private grants/loans pursued by project proponent, and/or project partners	
<b>10</b>	Status of any grant/loan funding applications	
<b>11</b>	Note Project affiliations with one or more DWR IRWM planning entities	
<b>12</b>	Status of any applicable permits	

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

*Investor Owned Water Utilities'*

*Existing Recycled Water Projects*

# Recycled Water Workshop Report

---

February 1, 2013

Attachment D

## **Recycled Water Plans for Class A Water Utilities Companies**

This is a summary of existing recycled water projects and plans for future recycled water projects for the ten Class A Investor Owned Water Utilities (IOWU) regulated by the California Public Utilities Commission (Commission). The summary was generated from the section on recycled water in the 2010 Urban Water Management Plan and responses to inquiries from the Department of Ratepayers Advocates (DRA), the Division of Water and Audits (DWA) and other sources for each of the ten Class A IOWUs. The ten IOWUs are, Apple Valley Ranchos Water Company, San Jose Water Company, California Water Service Water Company, California American Water Company, Golden State Water Company, Great Oaks Water Company, Park Water Company, San Gabriel Valley Water Company, Suburban Water Systems, and Valencia Water Company.

### **Apple Valley Water Company**

Apple Valley Water Company does not own a wastewater treatment plant and does not anticipate that there are potential recycled water customers within its service areas. Apple Valley Water Company's recycled water projects are unfeasible since the existing waste water system consists of mostly septic tank systems and there is a long distance from the sewage treatment plant to the customer. Apple Valley Water Company does not have plans for any recycled water projects. (2010 Urban Water Management Plan).

### **San Jose Water Company**

San Jose Water Company does not own any wastewater treatment plants, but does provide indirect recycled water distribution services. San Jose Water Company's recycled water service is limited to meter reading and billing of recycled water within its service area. Its recycled water' wholesaler is the South Bay Water Recycling (SBWR) that manages recycled water from its producer, the San Jose/Santa Clara Water Pollution Control Plant. SBWR provides tertiary treated recycled water for irrigation use to the customers residing in the cities of Milpitas, Santa Clara and San Jose. Recycled water is priced at \$2.123 per Ccf compared to potable water rates of \$2.52 per Ccf.

San Jose Water Company pays for all construction costs to retrofit an existing site within its service area to connect to the South Bay Water Recycling distribution system for recycled water.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

San Jose Water Company partnered with the City of San Jose's South Bay Recycled Water Program for the San Jose Water Company recycled water pipeline construction improvements. The project sources of funding consisted of the following: over \$200 million from the South Bay Recycled Water Program and \$16 million from the San Jose Water Company General Rate Case (2010 to 2012). The total duration of the project was 5 years (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

The San Jose Water Company Recycled Water pipeline construction improvements partnered with the South Bay Water Recycling and the Bay Area Recycled Water Coalition; San Jose also partnered indirectly with the Santa Clara Valley Water District for the Advance Water Treatment System portion of its recycled water project. San Jose Water Company is seeking over \$6 million of federal funding from the Title XVI construction grants partnering with the BARWC. San Jose Water Company was awarded \$250 million in federal grants for the required Title XVI's feasibility study. San Jose Water Company requested approval of funding through its General Rate Case (2013 to 2015). The total project duration was 1 year and it is still ongoing (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

### California Water Service Company

California Water Service Company (California Water) does not own a wastewater treatment plant in the State of California. Its recycled service consists of providing distribution of recycled water to customers. Currently, California Water distributes recycled water in only two of its districts, Dominguez and East Los Angeles.<sup>43</sup> (2010 Urban Water Management Plan)

#### Dominguez District

California Water's Dominguez district is one of the largest districts for the distribution of recycled water. California Water anticipates that there may be potential annual average demand of recycled water of 19,100 AF and may increase to 70,000 AF of tertiary treated recycled water per year for this district. The Dominguez district purchases treated recycled water from West Basin Municipal Water District (West

---

<sup>43</sup> California Water lists the following four reasons why there is not a market for the distribution of recycled water in many of its other districts. First, the Bear Gulch, Bakersfield, King City and Antelope Valley districts purchase recycled water directly from the wastewater treatment plant. Second, the Chico-Hamilton and Dixon districts would require a large distribution system to deliver recycled water that is not cost effective. Third, potential recycled water customers in the Los Altos, Livermore, Mid-Peninsula, Marysville, Oroville, and Suburban service areas are not California Water customers. Fourth, Kern River Valley District's waste water is addressed through either leach fields or septic tanks sewer systems which eliminates the supply of waste water as a feedstock for a recycled water system.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

Basin). Cal Water anticipates that the use of recycled water will increase as the City of Dominguez expands (2010 Urban Water Management Plan).

### **East Los Angeles District**

The second largest recycled water distribution service for California Water is its East Los Angeles district which is composed of 71 cities and six waste water treatment plants. The potential uses of recycled water in the East Los Angeles district are for groundwater recharge, irrigation and industrial use. California Water is currently distributing recycled water in its East Los Angeles district to more than 210 industrial, commercial, and landscape irrigation sites (2010 Urban Water Management Plan).

The Los Angeles County Sanitation District owns, operates, and maintains all of its wastewater and sewer systems. Its treated wastewater is currently being discharged to the ocean and is now being considered a potential future supply source of recycled water. Another potential recycled water supply source for California Water is the Hyperion Wastewater Treatment Facility owned by West Basin. West Basin's treated wastewater is partially discharged to the ocean and partially used for groundwater replenishment, landscape irrigation, and industrial processes (2010 Urban Water Management Plan).

### **Palos Verdes District**

California Water anticipates its Palos Verdes district may be a potential candidate for distribution of recycled water. Current treated wastewater in the Palos Verdes district is from West Basin and is treated at the Hyperion Wastewater Treatment Plant. Currently, treated wastewater is used as a barrier for seawater intrusion, for industrial processes, residential, and landscape irrigation. According to California Water, West Basin may potentially supply 105 recycled water customers and deliver up to 70,000 AF of tertiary treated recycled water per year (2010 Urban Water Management Plan).

Additional potential recycled water customers for California Water are those customers in the City of Carson located within a portion in the Palos Verdes service area (2010 Urban Water Management Plan).

### **South San Francisco District**

California Water's South San Francisco district has two future recycled water projects that will serve both private and public customers. California Water is considering partnering with the City of South San Francisco for the construction of the distribution systems for these two projects. The City of South San Francisco is currently conducting the environmental review and permitting phase of the project (2010 Urban Water Management Plan).



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

### **California American Water Company**

California American Water Company (California American) does not own wastewater treatment plants in any of its districts. However, California American has presented some feasibility studies in its 2010 Urban Water Management Plan. California American does not anticipate pursuing recycled water systems for its San Diego District (Southern Division), Ventura County District, and Cordova Water System in Sacramento. Recycled water systems in these areas are not cost effective as the distance from the wastewater treatment plants to the potential customers would require costly distribution pipelines. The 2010 Urban Water Management Plan lists three irrigation customers and nine municipal school sites as potential recycled water customers in the San Diego District (Northern Division) (2010 Urban Water Management Plan).

California American Water Company is undergoing a 3,500 acre-feet per year groundwater replenishment proposal as part of the Monterey Water Supply project which is estimated by the Company at \$367 million. The Groundwater Replenishment Project is Cal-Am's water recycling component of the Monterey Peninsula Water Supply Project (MPWSP), A.12-04-019. It intends to create a drought-proof underground reservoir that can be used as a source of supply by taking the effluent from the Monterey Regional Water Pollution Control Agency existing wastewater treatment plant, filtering it through a new advanced water treatment plant, and injecting the highly treated product water into the Seaside Basin Aquifer, where it would be diluted and stored (A.12-04-019, p 5-6).

### **Great Oaks Water Company**

Great Oaks Water Company does not indicate any potential recycled water customers in its 2010 Urban Water Management Plan (2010 Urban Water Management Plan).

### **Park Water Company**

Park Water Company (Park Water) is a distributor of recycled water for its service area customers. Park Water purchases recycled water to distribute from the Central Basin Municipal Water District (Central Basin). The Central Basin has its own water recycled source which relies on artificial replenishment from storm water runoff capture and infiltration into its groundwater basins to replace annual overdraft. Park Water's existing customers use recycled water for agriculture (nursery) and landscape. Central Basin, Park Water's wholesaler, has been successful in its marketing efforts and financial incentives to sell recycled water to customers. Central Basin's recycled water wholesale rates are less than Park Water's potable water rates. Market incentives consist of funding a customer's plumbing retrofit suitable for recycled water through low interest loans to customers. Park Water identified Central Basin's targeted

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

customers as part of its future water recycled distribution services (2010 Urban Water Management Plan).

Park Water Company has partnered with 17 other parties for the Century Reclamation Project (for Recycled Water), including, the Los Angeles County Sanitation District, the Central Basin Municipal District, and the Metropolitan Water District of Southern California. The Century Reclamation Project obtained \$20 million funding from the United States Bureau of Reclamation Title 16 Water Recycling Program and continues to obtaining subsidies such as \$250 per acre feet rebate from the Metropolitan Water District of Southern California and \$10 per acre feet parcel tax on all properties in the Central Basin service area. The total time duration of the Project was 13 years which begin in 1989 where the first phase of the system was completed in the year 2002 (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

### **San Gabriel Valley Water Company**

San Gabriel Valley Water Company (San Gabriel) provides recycled water distribution service for irrigation uses. Customers include schools, landscape nurseries, the Whittier Narrows Recreation Area, Los Angeles County's Sorenson Park and Public Library, and portions of the Rio Hondo Community College and Rose Hills Memorial Park. Recycled water is produced by the Los Angeles County Sanitation District's (LACSD) San Jose Creek Water Reclamation Plant and Whittier Narrows Water Reclamation Plant.

San Gabriel also purchases recycled water supplies from Central Basin and Upper San Gabriel Valley Municipal Water District (Upper District). Use of recycled water allows San Gabriel to reduce the amount of groundwater production required from the Main San Gabriel and Central Basins and deliveries of imported water supplies (2010 Urban Water Management Plan).

Central Basin's potential future recycled water customers' usages are for landscape irrigation and industrial processing. San Gabriel has divided the Upper District recycled water project into construction phases including Phase I, IIA, and IIB.

Phase I delivers recycled water to City of Industry, City of Whittier, and some unincorporated areas of Los Angeles County, all current customers of San Gabriel .

Phase IIA will deliver recycled water to South El Monte and Whittier Narrows.

Phase IIB will deliver recycled water to the City of Industry, Rowland Water District, Suburban Water Systems, the Walnut Valley Water District, and potentially to the City of Arcadia. In addition, potential

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

additional customers from the Montebello and Whittier portions of San Gabriel service area may be added as part of the San Gabriel's distribution of recycled water from the Central Basin project (2010 Urban Water Management Plan).

San Gabriel has partnered with the Upper San Gabriel Valley Municipal Water District for two of its recycled water projects, 1) the Rose Hills Project and 2) the Whittier Narrows/Rosemead Recycled Water Project and River Avenue pipeline extension. The Rose Hills Project obtained \$3,427,600 from the San Gabriel Valley MWD and \$1,142,500 fund from the United States Bureau of Reclamation. The project total time duration was 2 years allocated into a 10-month pre-construction and a 12-month construction with a 2 month post construction (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011)..

The Whittier Narrows/Rosemead Recycled Water Project and River Avenue pipeline extension obtained \$5,364,300 funds from the Upper San Gabriel Valley MWD; \$2,478,500 funds from the United States Bureau of Reclamation; \$1,644,900 funds from the State Water Resources Control Board; \$426,400 funds from the MWD Local Resources Program; and \$200,000 from San Gabriel's River Avenue pipeline extension. The project total time duration was also 2 years allocated into a 10-month pre-construction and a 13-month construction phase with a one-month post construction (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

San Gabriel did not partner with any other agency for the Whittier Narrows/Rosemead Extension Recycled Water Project. San Gabriel obtained funding for this project allocated as, 1) \$3,807,800 from the Upper San Gabriel MWD and 2) \$1,324,300 from the MWD Public Sector Program funds. The project's time duration was an 8-month pre-construction and an 8-month construction with a 4-month post construction (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

### **Suburban Water Systems**

Suburban Water Systems (Suburban Water) purchases recycled water from the City of Industry and LACSD. It is currently distributing recycled water at a 15 percent discount to the potable water rate. Suburban Water and Upper District have an agreement to operate a portion of the recycled water system that serves Suburban Water's customers. The City of Industry's recycled water project supplies the San Jose Hills service area. Suburban Water performed a study which concluded that there is the potential for a recycled water project to serve industrial customers in the San Jose Hills and the Whittier/La Mirada Service areas. However, at this point such a project is not cost-effective due to the cost of installing new recycled water pipelines. Suburban Water has no further plans to continue to

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment D

study this project. A second recycled water project for the San Jose Hills service area identified potential industrial customers. However, a more detailed study has yet to be performed (2010 Urban Water Management Plan).

The Suburban Water's San Jose Hills service area includes the cities of West Covina and Walnut that are part of the Upper District's Phases IIA and IIB Recycled Water Facilities Study. The study identified potential recycled water customers including the South Hills Country Club and leachate blending for landscape irrigation use at schools, parks, and medians.

Suburban Water partners for the City of Industry Recycled Water Project Phase II B include, the Sanitation District of Los Angeles County for its recycled water source; the City of Industry and Rowland Water District who is the transporting intermediary; Upper San Gabriel Valley Municipal Water District who is the distribution system owner; Upper District who is in charge of coordinating customer conversion as funding; and Suburban Water who is in charge of the system's operation and service area. Suburban Water obtained funding for the City of Industry Recycled Water Project Phase IIB from the following sources: \$11.5 million, 0% interest loan and a \$5 million grant from the State Water Resources Control Board; \$2.5 million grant from the Bureau of Reclamation; \$1.8 million rebate from the Local Resource Planning funding from the Metropolitan Water District of Southern California. The total duration of the project was 11 years consisting of the following: the planning and discussion lasted 9 years, which began in the late 1990's and actual planning began at the end of the year 2008. The construction project phase time duration was 2 years (Data Request for Order Instituting Rulemaking for Water Recycling R.10-11-014, November 11, 2011).

### **Valencia Water Company**

Valencia Water Company is part of the Castaic Lake Water Agency (Castaic Lake) which was formed by four water purveyors. Valencia Water Company participated with Castaic Lake in the preparation of its Urban Water Management Plan that includes plans for recycled water. Castaic Lake has implemented a Water Recycled Plan which has been approved by its Board. Phase 1 of the Recycled Plan will provide recycled water to irrigation users including a golf course and roadway median strips. Another Phase 1 project is the Newhall Ranch development which is projected to deliver recycled water for irrigation usage and other non-potable uses. Phase 2 of the Recycled Plan identifies potential customers around the Santa Clara River including the Santa Clarita Central Park (Phase 2A) and the Bridgeport and River Village developments (Phase 2B). Phase 2C includes the South End Recycled Water project (2010 Urban Water Management Plan).

# Recycled Water Workshop Report

---

February 1, 2013

Attachment D

## **Golden State Water Company**

Golden State Water Company (Golden State) does not own any wastewater treatment plants and also does not sell or distribute recycled water to its customers. However, Golden State does allow wholesalers to sell recycled water to customers that are located within its service areas. The Cities of Artesia and Cordova are customers of Golden State and purchase recycled water from Central Basin. The Central Basin supply source is from LACSD. Customers in Golden State's Southwest service area also purchase recycled water from a wholesaler, West Basin. West Basin does not anticipate expanding its existing recycled water distribution pipelines in Golden State's Southwest service area due to cost effectiveness owing to the distance to the nearest potential customer. Golden State does not anticipate pursuing recycled water projects at this time (2010 Urban Water Management Plan).

# Recycled Water Workshop Report

February 1, 2013

Attachment D

	1	2	3	4
IOUW Name	Names of Water Recycled Project and Parties Involved	Type of Treatment	Resources used: entity name(s) and amount of funding provided	Time Duration Project
Suburban Water Company	<p>Project Name: City of Industry Recycled Water Project Phase IIB</p> <p>Parties</p> <p>Recycled Water Source: Sanitation District of Los Angeles CountyTransporting Intermediary:City of Industry &amp; Rowland Water DistrictDistribution System Owner:Upper San Gabriel Valley Municipal Water DistrictCustomer Conversions:Upper District to coordinate and fund customer conversions.System Operation and Service Area:Suburban Water Systems</p>	San Jose Creek Water RP: Tertiary treatment	<p>State Water Resources Control Board: \$11.5 million, 0% loan</p> <p>Upper San Gabriel Valley Municipal Water District: \$11.5 million reserves</p> <p>State Water Resources Control Board: \$5.0 million, grant</p> <p>Bureau of Reclamation: \$2.5 million, grant</p> <p>Metropolitan Water District of Southern California (MWD): \$1.8 million, LRP rebates (local resources planning) funding</p>	<p>Planning and discussion for project started in late 1990's. Planning work on current form of project started in late 2008/early 2009.</p> <p>Total = 9 yrs</p> <p>Project started construction in April 2010, deliveries started in December 2010, and construction is scheduled to be completed by the end of 2012.</p> <p>Total = 2 yrs</p>

# Recycled Water Workshop Report

February 1, 2013

Attachment D

IOUW Name	Names of Water Recycled Project and Parties Involved	Type of Treatment	Resources used: entity name(s) and amount of funding provided	Time Duration Project
<b>San Gabriel Valley Water Company</b>	Rose Hills Project  Partner: Upper San Gabriel Valley Municipal Water District	Tertiary Treatment	\$4,570: \$3,427,600 by USGVMWD and \$1,142,500 funded by the United States Bureau of Reclamation (USBR).	1. Pre-construction: July 2000 to May 2001. 2. Construction: June 2001 to June 2002 3. Post construction: minimal  Total = 2 yrs
	Whittier Narrows/  Rosemead Recycled Water Project and River Avenue pipeline extension  Partner: Upper San Gabriel Valley Municipal Water District (USGV MWD)	Tertiary Treatment	\$9,914,100: \$5,364,300 funded by <b>USGV MWD</b> , \$2,478,500 funded by <b>USBR</b> , \$1,644,900 funded by <b>State Water Resources Control Board</b> , and \$426,400 funded by <b>MWD Local Resources Program Funding</b> .  San Gabriel funded the \$200,000 River Avenue pipeline extension.	1. Pre-construction: June 2004 to April 2005 2. Construction: June 2005 to July 2006 3. Post construction: minimal  Total = 2 yrs
	Whittier Narrows/ Rosemead Extension Recycled Water Project	Tertiary Treatment	\$5,297,300: \$3,807,800 funded by <b>USGVMWD</b> , \$1,324,300 funded by <b>MWD Public Sector Program Funding</b>	1. Pre-construction: June 2008 to February 2009 2. Construction: March 2009 to November 2011 3. Post construction: minimal  Total = 2 yrs

# Recycled Water Workshop Report

February 1, 2013

Attachment D

IOUW Name	Names of Water Recycled Project and Parties Involved	Type of Treatment	Resources used: entity name(s) and amount of funding provided	Time Duration Project
<b>San Jose Water Company</b>	SJWC Recycled Water Alignments G, H, and C in partnership with City of San Jose South Bay Recycled Water Program (SBWR).	Tertiary	SBWR – over \$200 M initial investment  SJWC funded through GRC 2010 to 2012 - \$16M	<ol style="list-style-type: none"> <li>1) Discussion with SBWR began in 2006. Amendment executed June, 2010.</li> <li>2) Construction started in November 2010 to present</li> <li>3) First customer online August 2011.</li> </ol> <p>Total = 5 yrs</p>
	SJWC Recycled Water Alignment S, M, N, R, A, and D in partnership with SBWR and Bay Area Recycled Water Coalition (BARWC). Santa Clara Valley Water District is an indirect partner through partnership with SBWR for Advancement Water Treatment (AWT) system.	Tertiary blended with AWT	SJWC is seeking over \$6M in federal funding through Title XVI construction grants in partnership with BARWC. SJWC has been awarded approximately \$250K in federal grants to perform a Feasibility Study which is required for Title XVI construction grants. SJWC will be requesting funding in GRC 2013 to 2015.	<ol style="list-style-type: none"> <li>1) Partnership discussion with BARWC began in early 2010.</li> <li>2) Project is still in the planning phase.</li> </ol> <p>Total = 1 year plus year (ongoing).</p>



# Recycled Water Workshop Report

---

February 1, 2013

Attachment D

IOUW Name	Names of Water Recycled Project and Parties Involved	Type of Treatment	Resources used: entity name(s) and amount of funding provided	Time Duration Project
Park Water Company	Century Reclamation Project 17 parties LACSD CBMWD MWDSC utilities	Tertiary	\$20 million – US Bureau of Reclamation Title 16 Water Recycling Program  --continuous support from subsidies:  -\$250/AF rebate from MWDSC  -\$10 per parcel annual tax on all properties in the Central Basin service area	Planning began in 1989. First phase of system completed in 2002.  Total – 13 yrs.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

### *Water Recycling, Water Reclamation and other related Water Codes<sup>1</sup>*

---

<sup>1</sup> PORTER-COLOGNE WATER QUALITY CONTROL ACT (CAL. WATER CODE, DIVISION 7) EFFECTIVE JANUARY 1, 2013

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

### **PORTER-COLOGNE WATER QUALITY CONTROL ACT (CAL. WATER CODE, DIVISION 7) EFFECTIVE JANUARY 1, 2013**

#### **ARTICLE 5. CIVIL MONETARY REMEDIES**

##### **§ 13350.. Civil liability; amount; recovery**

(a) A person who (1) violates a cease and desist order or cleanup and abatement order hereafter issued, reissued, or amended by a regional board or the state board, or (2) in violation of a waste discharge requirement, waiver condition, certification, or other order or prohibition issued, reissued, or amended by a regional board or the state board, discharges waste, or causes or permits waste to be deposited where it is discharged, into the waters of the state, or (3) causes or permits any oil or any residuary product of petroleum to be deposited in or on any of the waters of the state, except in accordance with waste discharge requirements or other actions or provisions of this division, shall be liable civilly, and remedies may be proposed, in accordance with subdivision (d) or (e).

(b) (1) A person who, without regard to intent or negligence, causes or permits a hazardous substance to be discharged in or on any of the waters of the state, except in accordance with waste discharge requirements or other provisions of this division, shall be strictly liable civilly in accordance with subdivision (d) or (e).

(2) For purposes of this subdivision, the term “discharge” includes only those discharges for which Section 13260 directs that a report of waste discharge shall be filed with the regional board.

(3) For purposes of this subdivision, the term “discharge” does not include an emission excluded from the applicability of Section 311 of the Clean Water Act (33 U.S.C. Sec. 1321) pursuant to Environmental Protection Agency regulations interpreting Section 311(a)(2) of the Clean Water Act (33 U.S.C. Sec. 1321(a)(2)).

(c) A person shall not be liable under subdivision (b) if the discharge is caused solely by any one or combination of the following:

(1) An act of war.

(2) An unanticipated grave natural disaster or other natural phenomenon of an exceptional, inevitable, and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

(3) Negligence on the part of the state, the United States, or any department or agency thereof. However, this paragraph shall not be interpreted to provide the state, the United States, or any department or agency thereof a defense to liability for any discharge caused by its own negligence.

(4) An intentional act of a third party, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

(5) Any other circumstance or event that causes the discharge despite the exercise of every reasonable precaution to prevent or mitigate the discharge.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(d) The court may impose civil liability either on a daily basis or on a per gallon basis, but not on both.

(1) The civil liability on a daily basis shall not exceed fifteen thousand dollars (\$15,000) for each day the violation occurs.

(2) The civil liability on a per gallon basis shall not exceed twenty dollars (\$20) for each gallon of waste discharged.

(e) The state board or a regional board may impose civil liability administratively pursuant to Article 2.5 (commencing with Section 13323) of Chapter 5 either on a daily basis or on a per gallon basis, but not on both.

(1) The civil liability on a daily basis shall not exceed five thousand dollars (\$5,000) for each day the violation occurs.

(A) When there is a discharge, and a cleanup and abatement order is issued, except as provided in subdivision (f), the civil liability shall not be less than five hundred dollars (\$500) for each day in which the discharge occurs and for each day the cleanup and abatement order is violated.

(B) When there is no discharge, but an order issued by the regional board is violated, except as provided in subdivision (f), the civil liability shall not be less than one hundred dollars (\$100) for each day in which the violation occurs.

(2) The civil liability on a per gallon basis shall not exceed ten dollars (\$10) for each gallon of waste discharged. (f) A regional board shall not administratively impose civil liability in accordance with paragraph (1) of subdivision (e) in an amount less than the minimum amount specified, unless the regional board makes express findings setting forth the reasons for its action based upon the specific factors required to be considered pursuant to Section 13327.

(g) The Attorney General, upon request of a regional board or the state board, shall petition the superior court to impose, assess, and recover the sums. Except in the case of a violation of a cease and desist order, a regional board or the state board shall make the request only after a hearing, with due notice of the hearing given to all affected persons. In determining the amount to be imposed, assessed, or recovered, the court shall be subject to Section 13351.

(h) Article 3 (commencing with Section 13330) and Article 6 (commencing with Section 13360) apply to proceedings to impose, assess, and recover an amount pursuant to this article.

(i) A person who incurs any liability established under this section shall be entitled to contribution for that liability from a third party, in an action in the superior court and upon proof that the discharge was caused in whole or in part by an act or omission of the third party, to the extent that the discharge is caused by the act or omission of the third party, in accordance with the principles of comparative fault.

(j) Remedies under this section are in addition to, and do not supersede or limit, any and all other remedies, civil or criminal, except that no liability shall be recoverable under subdivision (b) for any discharge for which liability is recovered under Section 13385.

(k) Notwithstanding any other law, all funds generated by the imposition of liabilities pursuant to this section shall be deposited into the Waste Discharge Permit Fund. These moneys shall be separately accounted for, and shall be expended by the state board, upon appropriation by the Legislature, to assist regional boards, and other public agencies with authority to clean up waste or abate the effects of the waste, in cleaning up or abating the effects of the

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

waste on waters of the state, or for the purposes authorized in Section 13443, or to assist in implementing Chapter 7.3 (commencing with Section 13560).

### **CHAPTER 7. WATER RECLAMATION ARTICLE 4**

**§ 13521. REGULATION OF RECLAMATION. SHORT TITLE.** Statewide criteria of the Water Code is amended to read: 13521, Section 2. The State Department of Public Health shall establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.

**§ 13560. Chapter 7.3. Direct and Indirect Potable Reuse.**

- (a) In February 2009, the state board unanimously adopted, as Resolution No. 2009-0011, an updated water recycling policy, which includes the goal of increasing the use of recycled water in the state over 2002 levels by at least 1,000,000 acre-feet per year by 2020 and by at least 2,000,000 acre-feet per year by 2030.
- (b) Section 13521 requires the department to establish uniform statewide recycling criteria for each varying type of use of recycled water where the use involves the protection of public health.
- (c) The use of recycled water for indirect potable reuse is critical to achieving the state board's goals for increased use of recycled water in the state. If direct potable reuse can be demonstrated to be safe and feasible, implementing direct potable reuse would further aid in achieving the state board's recycling goals.
- (d) Although there has been much scientific research on public health issues associated with indirect potable reuse through groundwater recharge, there are a number of significant unanswered questions regarding indirect potable reuse through surface water augmentation and direct potable reuse.
- (e) Achievement of the state's goals depends on the timely development of uniform statewide recycling criteria for indirect and direct potable water reuse.
- (f) This chapter is not intended to delay, invalidate, or reverse any study or project, or development of regulations by the department, the state board, or the regional boards regarding the use of recycled water for indirect potable reuse for groundwater recharge, surface water augmentation, or direct potable reuse.
- (g) This chapter shall not be construed to delay, invalidate, or reverse the department's ongoing review of projects consistent with Section 116551 of the Health and Safety Code.

**§ 13561.**

- (a) "Department" means the State Department of Public Health.
- (b) "Direct potable reuse" means the planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant.
- (c) "Indirect potable reuse for groundwater recharge" means the planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

water supply for a public water system, as defined in Section 116275 of the Health and Safety Code.

(d) “Surface water augmentation” means the planned placement of recycled water into a surface water reservoir used as a source of domestic drinking water supply.

(e) “Uniform water recycling criteria” has the same meaning as in Section 13521.

**§ 13561.5.** The state board shall enter into an agreement with the department to assist in implementing this chapter.

**§ 13562.** (a) (1) On or before December 31, 2013, the department shall adopt uniform water recycling criteria for indirect potable reuse for groundwater recharge.

(2) (A) Except as provided in subparagraph (C), on or before December 31, 2016, the department shall develop and adopt uniform water recycling criteria for surface water augmentation.

(B) Prior to adopting uniform water recycling criteria for surface water augmentation, the department shall submit the proposed criteria to the expert panel convened pursuant to subdivision (a) of Section 13565. The expert panel shall review the proposed criteria and shall adopt a finding as to whether, in its expert opinion, the proposed criteria would adequately protect public health.

(C) The department shall not adopt uniform water recycling criteria for surface water augmentation pursuant to subparagraph (A), unless and until the expert panel adopts a finding that the proposed criteria would adequately protect public health.

(b) Adoption of uniform water recycling criteria by the department is subject to the requirements of Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

**§ 13563.** (a) (1) The department shall investigate and report to the Legislature on the feasibility of developing uniform water recycling criteria for direct potable reuse.

(2) The department shall complete a public review draft of its report by June 30, 2016. The department shall provide the public not less than 45 days to review and comment on the public review draft.

(3) The department shall provide a final report to the Legislature by December 31, 2016. The department shall make the final report available to the public.

(b) In conducting the investigation pursuant to subdivision (a), the department shall examine all of the following: (1) The availability and reliability of recycled water treatment technologies necessary to ensure the protection of public health.

(2) Multiple barriers and sequential treatment processes that may be appropriate at wastewater and water treatment facilities.

(3) Available information on health effects.

(4) Mechanisms that should be employed to protect public health if problems are found in recycled water that is being served to the public as a potable water supply, including, but not limited to, the failure of treatment systems at the recycled water treatment facility.

(5) Monitoring needed to ensure protection of public health, including, but not limited to, the identification of appropriate indicator and surrogate constituents.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(6) Any other scientific or technical issues that may be necessary, including, but not limited to, the need for additional research.

(c) (1) Notwithstanding Section 10231.5 of the Government Code, the requirement for submitting a report imposed under paragraph (3) of subdivision (a) is inoperative on December 31, 2020.

(2) A report to be submitted pursuant to paragraph (3) of subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

**§ 13563.5.** (a) The department, in consultation with the state board, shall report to the Legislature as part of the annual budget process, in each year from 2011 to 2016, inclusive, on the progress towards developing and adopting uniform water recycling criteria for surface water augmentation and its investigation of the feasibility of developing uniform water recycling criteria for direct potable reuse.

(b) (1) A written report submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

(2) Pursuant to Section 10231.5 of the Government Code, this section is repealed on January 1, 2017.

**§ 13564.** In developing uniform recycling criteria for surface water augmentation, the department shall consider all of the following: (a) The final report from the National Water Research Institute Independent Advisory Panel for the City of San Diego Indirect Potable Reuse/Reservoir Augmentation (IPR/RA) Demonstration Project.

(b) Monitoring results of research and studies regarding surface water augmentation.

(c) Results of demonstration studies conducted for purposes of approval of projects using surface water augmentation.

(d) Epidemiological studies and risk assessments associated with projects using surface water augmentation.

(e) Applicability of the advanced treatment technologies required for recycled water projects, including, but not limited to, indirect potable reuse for groundwater recharge projects.

(f) Water quality, limnology, and health risk assessments associated with existing potable water supplies subject to discharges from municipal wastewater, stormwater, and agricultural runoff.

(g) Recommendations of the State of California Constituents of Emerging Concern Recycled Water Policy Science Advisory Panel.

(h) State funded research pursuant to Section 79144 and subdivision (b) of Section 79145.

(i) Research and recommendations from the United States Environmental Protection Agency Guidelines for Water Reuse.

(j) Other relevant research and studies regarding indirect potable reuse of recycled water.

**§13565.** (a) (1) The department shall convene and administer an expert panel for the purposes of advising the department on public health issues and scientific and technical matters regarding

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

development of uniform water recycling criteria for indirect potable reuse through surface water augmentation and investigation of the feasibility of developing uniform water recycling criteria for direct potable reuse.

(2) The expert panel shall be comprised, at a minimum, of a toxicologist, an engineer licensed in the state with at least three years' experience in wastewater treatment, an engineer licensed in the state with at least three years' experience in treatment of drinking water supplies and knowledge of drinking water standards, an epidemiologist, a microbiologist, and a chemist.

(3) Members of the expert panel may be reimbursed for reasonable and necessary travel expenses.

(b) (1) The department may appoint an advisory group, task force, or other group, comprised of no fewer than nine representatives of water and wastewater agencies, local public health officers, environmental organizations, environmental justice organizations, public health nongovernmental organizations, and the business community, to advise the department regarding the development of uniform water recycling criteria for direct potable reuse.

(2) Environmental, environmental justice, and public health nongovernmental organization representative members of the advisory group, task force, or other group may be reimbursed for reasonable and necessary travel expenses. 13566. In performing its investigation of the feasibility of developing the uniform water recycling criteria for direct potable reuse, the department shall consider all of the following:

(a) Recommendations from the expert panel appointed pursuant to subdivision (a) of Section 13565.

(b) Recommendations from an advisory group, task force, or other group appointed by the department pursuant to subdivision (b) of Section 13565.

(c) Regulations and guidelines for these activities from jurisdictions in other states, the federal government, or other countries.

(d) Research by the state board regarding unregulated pollutants, as developed pursuant to Section 10 of the recycled water policy adopted by state board Resolution No. 2009-0011.

(e) Results of investigations pursuant to Section 13563.

(f) Water quality and health risk assessments associated with existing potable water supplies subject to discharges from municipal wastewater, stormwater, and agricultural runoff.

**§ 13567.** An action authorized pursuant to this chapter shall be consistent, to the extent applicable, with the federal Clean Water Act (33 U.S.C. Sec. 1251 et seq.), the federal Safe Drinking Water Act (42 U.S.C. Sec. 300f et seq.), this division, and the California Safe Drinking Water Act (Chapter 4 (commencing with Section 116270) of Part 12 of Division 104 of the Health and Safety Code).

**§ 13569.** The department may accept funds from any source, and may expend these funds, upon appropriation by the Legislature, for the purposes of this chapter.



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

### CHAPTER 7. WATER RECLAMATION ARTICLE 2. DECLARATION OF POLICY

**§ 13510.** Legislative declaration It is hereby declared that the people of the state have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.

**§ 13511.** Legislative findings. The Legislature finds and declares that a substantial portion of the future water requirements of this state may be economically met by beneficial use of recycled water. The Legislature further finds and declares that the utilization of recycled water by local communities for domestic, agricultural, industrial, recreational, and fish and wildlife purposes will contribute to the peace, health, safety and welfare of the people of the state. Use of recycled water constitutes the development of “new basic water supplies” as that term is used in Chapter 5 (commencing with Section 12880) of Part 6 of Division 6.

**§ 13512. Legislative intent.** It is the intention of the Legislature that the state undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state.

**§ 13550.** Legislative findings (a) The Legislature hereby finds and declares that the use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available which meets all of the following conditions, as determined by the state board, after notice to any person or entity who may be ordered to use recycled water or to cease using potable water and a hearing held pursuant to Article 2 (commencing with Section 648) of Chapter 1.5 of Division 3 of Title 23 of the California Code of Regulations: (1) The source of recycled water is of adequate quality for these uses and is available for these uses. In determining adequate quality, the state board shall consider all relevant factors, including, but not limited to, food and employee safety, and level and types of specific constituents in the recycled water affecting these uses, on a user-by-user basis. In addition, the state board shall consider the effect of the use of recycled water in lieu of potable water on the generation of hazardous waste and on the quality of wastewater discharges subject to regional, state, or federal permits.

(2) The recycled water may be furnished for these uses at a reasonable cost to the user. In determining reasonable cost, the state board shall consider all relevant factors, including, but not limited to, the present and projected costs of supplying, delivering, and treating potable domestic water for these uses and the present and projected costs of supplying and delivering recycled water for these uses, and shall find that the cost of supplying the treated recycled water is comparable to, or less than, the cost of supplying potable domestic water.

(3) After concurrence with the State Department of Health Services, the use of recycled water from the proposed source will not be detrimental to public health.

(4) The use of recycled water for these uses will not adversely affect downstream water rights, will not degrade water quality, and is determined not to be injurious to plantlife, fish, and wildlife.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(b) In making the determination pursuant to subdivision

(a), the state board shall consider the impact of the cost and quality of the nonpotable water on each individual user.

(c) The state board may require a public agency or person subject to this article to furnish information which the state board determines to be relevant to making the determination required in subdivision (a).

**§ 13551.** Availability of recycled water A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any source of quality suitable for potable domestic use for nonpotable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses if suitable recycled water is available as provided in Section 13550; however, any use of recycled water in lieu of water suitable for potable domestic use shall, to the extent of the recycled water so used, be deemed to constitute a reasonable beneficial use of that water and the use of recycled water shall not cause any loss or diminution of any existing water right.

**§ 13552.** Legislative intent. The amendments to Sections 13550 and 13551 of the Water Code made during the first year of the 1991-92 Regular Session are not intended to alter any rights, remedies, or obligations which may exist prior to January 1, 1992, pursuant to, but not limited to, those sections or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.

**§ 13552.2.** Legislative findings (a) The Legislature hereby finds and declares that the use of potable domestic water for the irrigation of residential landscaping is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for this use, is available to the residents and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(b) The state board may require a public agency or person subject to this section to submit information that the state board determines may be relevant in making the determination required in subdivision (a).

**§ 13552.4.** Required use for landscaping (a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water for irrigation of residential landscaping, if all of the following requirements are met: (1) Recycled water, for this use, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing. (2) The use of recycled water does not cause any loss or diminution of any existing water right. (3) The irrigation systems are constructed in accordance with Chapter 3 (commencing with Section 60301) of Division 4 of Title 22 of the California Code of Regulations. (b) This section applies to both of the following:

(1) New subdivisions for which the building permit is issued on or after March 15, 1994, or, if a building permit is not required, new structures for which construction begins on or after March 15, 1994, for which the State Department of Public Health has approved the use of recycled water.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(2) Any residence that is retrofitted to permit the use of recycled water for landscape irrigation and for which the State Department of Public Health has approved the use of recycled water.

(c) (1) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project that only involves the repiping, redesign, or use of recycled water for irrigation of residential landscaping necessary to comply with a requirement prescribed by a public agency under subdivision (a).

(2) The exemption in paragraph (1) does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.

**§ 13552.5.** General statewide permit for recycled water use to irrigate landscape (a)(1) On or before July 31, 2009, the state board shall adopt a general permit for landscape irrigation uses of recycled water for which the State Department of Public Health has established uniform statewide recycling criteria pursuant to Section 13521.

(2) The state board shall establish criteria to determine eligibility for coverage under the general permit.

(3) For the purpose of developing the general permit and establishing eligibility criteria to carry out paragraph (1), the state board shall hold at least one workshop and shall consult with and consider comments from the regional boards, groundwater management agencies and water replenishment districts with statutory authority to manage groundwater pursuant to their principal act, and any interested party.

(4) The general permit shall include language that provides for the modification of the terms and conditions of the general permit if a regulatory or statutory change occurs that affects the application of the general permit or as necessary to ensure protection of beneficial uses.

(b) The state board shall establish a reasonable schedule of fees to reimburse the state board for the costs it incurs in implementing, developing, and administering this section.

(c) Following the adoption of the general permit pursuant to this section, an applicant may obtain coverage for a landscape irrigation use of recycled water by filing a notice of intent to be covered under the general permit and submitting the appropriate fee established pursuant to subdivision (b) to the state board.

(d) Coverage under the general permit adopted pursuant to this section is effective if all of the following apply: (1) The applicant has submitted a completed application. (2) The state board has determined that the applicant meets the eligibility criteria established pursuant to paragraph (2) of subdivision (a).

(3) The state board has made the application available for public review and comment for 30 days.

(4) The state board has consulted with the appropriate regional board.

(5) The executive officer of the state board approves the application. (e)(1) Except as provided by modification of the general permit, a person eligible for coverage under the general permit pursuant to

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

subdivision (d) is not required to become or remain subject to individual waste discharge requirements or water reclamation requirements.

(2) For a landscape irrigation use of recycled water, a person who is subject to general or individual waste discharge requirements prescribed pursuant to Section 13263 or 13377, or is subject to individual or master water reclamation requirements prescribed pursuant to Section 13523 or 13523.1, may apply for coverage under the general permit adopted pursuant to this section in lieu of remaining subject to requirements prescribed pursuant to those sections.

(f)(1) The state board shall designate an ombudsperson to coordinate and facilitate communication on recycled water, on the issuance of water reclamation requirements or waste discharge requirements, as applicable, pursuant to Section 13523 or 13523.1 or this section, and on the promotion of water recycling while ensuring reasonable protection of water quality in accordance with applicable provisions of state and federal water quality law.

(2) The person appointed pursuant to paragraph (1) shall facilitate consultations between the state board and the regional boards relating to matters described in that paragraph.

**§ 13552.6.** Regarding cooling (a) The Legislature hereby finds and declares that the use of potable domestic water for floor trap priming, cooling towers, and air-conditioning devices is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for these uses, is available to the user, and the water meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing. (b) The state board may require a public agency or person subject to this section to submit information that the state board determines may be relevant in making the determination required in subdivision (a).

**§ 13552.8.** Required use for cooling (a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water in floor trap priming, cooling towers, and airconditioning devices, if all of the following requirements are met:

(1) Recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(2) The use of recycled water does not cause any loss or diminution of any existing water right.

(3) If public exposure to aerosols, mist, or spray may occur, appropriate mist mitigation or mist control is provided, such as the use of mist arrestors or the addition of biocides to the water in accordance with criteria established pursuant to Section 13521.

(4) The person intending to use recycled water has prepared an engineering report pursuant to Section 60323 of Title 22 of the California Code of Regulations that includes plumbing design, cross-connection control, and monitoring requirements for the public agency, which are in compliance with criteria established pursuant to Section 13521 (b) This section applies to both of the following: (1) New industrial facilities and subdivisions for which the building permit is issued on or after March 15, 1994,

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

or, if a building permit is not required, new structures for which construction begins on or after March 15, 1994, for which the State Department of Health Services has approved the use of recycled water.

(2) Any structure that is retrofitted to permit the use of recycled water for floor traps, cooling towers, or air conditioning devices, for which the State Department of Health Services has approved the use of recycled water.

(c)(1) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project which only involves the repiping, redesign, or use of recycled water for floor trap priming, cooling towers, or air-conditioning devices necessary to comply with a requirement prescribed by a public agency under subdivision (a). (2) The exemption in paragraph (1) does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.

**§ 13553.** Regarding toilet flushing (a) The Legislature hereby finds and declares that the use of potable domestic water for toilet and urinal flushing in structures is a waste or an unreasonable use of water within the meaning of Section 2 of Article X of the California Constitution if recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing.

(b) The state board may require a public agency or person subject to this section to furnish any information that may be relevant to making the determination required in subdivision (a).

(c) For purposes of this section and Section 13554, "structure" or "structures" means commercial, retail, and office buildings, theaters, auditoriums, condominium projects, schools, hotels, apartments, barracks, dormitories, jails, prisons, and reformatories, and other structures as determined by the State Department of Public Health. (d) Recycled water may be used in condominium projects, as defined in Section 1351 of the Civil Code, subject to all of the following conditions: (1) Prior to the indoor use of recycled water in any condominium project, the agency delivering the recycled water to the condominium project shall file a report with, and receive written approval of the report from, the State Department of Public Health. The report shall be consistent with the provisions of Title 22 of the California Code of Regulations generally applicable to dual-plumbed structures and shall include all the following: (A) That potable water service to each condominium project will be provided with a backflow protection device approved by the State Department of Public Health to protect the agency's public water system, as defined in Section 116275 of the Health and Safety Code. The backflow protection device approved by the State Department of Public Health shall be inspected and tested annually by a person certified in the inspection of backflow prevention devices. (B) That any plumbing modifications in the condominium unit or any physical alteration of the structure will be done in compliance with state and local plumbing codes.

(C) That each condominium project will be tested by the recycled water agency or the responsible local agency at least once every four years to ensure that there are no indications of a possible cross connection between the condominium's potable and nonpotable systems.

(D) That recycled water lines will be color coded consistent with current statutes and regulations.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(2) The recycled water agency or the responsible local agency shall maintain records of all tests and annual inspections conducted.

(3) The condominium's declaration, as defined in Section 1351 of the Civil Code, shall provide that the laws and regulations governing recycled water apply, shall not permit any exceptions to those laws and regulations, shall incorporate the report described in paragraph (1), and shall contain the following statement: "NOTICE OF USE OF RECYCLED WATER This property is approved by the State Department of Public Health for the use of recycled water for toilet and urinal flushing. This water is not potable, is not suitable for indoor purposes other than toilet and urinal flushing purposes, and requires dual plumbing. Alterations and modifications to the plumbing system require a permit and are prohibited without first consulting with the appropriate local building code enforcement agency and your property management company or homeowners' association to ensure that the recycled water is not mixed with the drinking water."

(e) The State Department of Public Health may adopt regulations as necessary to assist in the implementation of this section.

(f) This section shall only apply to condominium projects that are created, within the meaning of Section 1352 of the Civil Code, on or after January 1, 2008.

(g) This section and Section 13554 do not apply to a pilot program adopted pursuant to Section 13553.1. § 13553.1. Legislative findings (a) The Legislature hereby finds and declares that certain coastal areas of the state have been using sea water to flush toilets and urinals as a means of conserving potable water; that this practice precludes the beneficial reuse of treated wastewater and has had a deleterious effect on the proper wastewater treatment process, and has led to corrosion of the sea water distribution pipelines and wastewater collection systems; and that this situation must be changed.

(b) There is a need for a pilot program to demonstrate that conversion to the use of recycled water in residential buildings for toilet and urinal flushing does not pose a threat to public health and safety.

(c) A city that is providing a separate distribution system for sea water for use in flushing toilets and urinals in residential structures may, by ordinance, authorize the use of recycled water for the flushing of toilets and urinals in residential structures if the level of treatment and the use of the recycled water meets the criteria set by the State Department of Health Services.

**§ 13554.** Required use for toilet flushing (a) Any public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, may require the use of recycled water for toilet and urinal flushing in structures, except a mental hospital or other facility operated by a public agency for the treatment of persons with mental disorders, if all of the following requirements are met: (1) Recycled water, for these uses, is available to the user and meets the requirements set forth in Section 13550, as determined by the state board after notice and a hearing. (2) The use of recycled water does not cause any loss or diminution of any existing water right. (3) The public agency has prepared an engineering report pursuant to Section 60323 of Title 22 of the California Code of Regulations that includes plumbing design, crossconnection control, and monitoring requirements for the use site, which are in compliance with criteria established pursuant to Section 13521.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(b) This section applies only to either of the following: (1) New structures for which the building permit is issued on or after March 15, 1992, or, if a building permit is not required, new structures for which construction begins on or after March 15, 1992.

(2) Any construction pursuant to subdivision (a) for which the State Department of Health Services has, prior to January 1, 1992, approved the use of recycled water.

(c) Division 13 (commencing with Section 21000) of the Public Resources Code does not apply to any project which only involves the repiping, redesign, or use of recycled water by a structure necessary to comply with a requirement issued by a public agency under subdivision (a). This exemption does not apply to any project to develop recycled water, to construct conveyance facilities for recycled water, or any other project not specified in this subdivision.

**§ 13554.2.** Reimbursement of costs (a) Any person or entity proposing the use of recycled water shall reimburse the State Department of Health Services for reasonable costs that department actually incurs in performing duties pursuant to this chapter.

(b)(1) Upon a request from the person or entity proposing the use of recycled water, the State Department of Health Services shall, within a reasonable time after the receipt of the request, provide an estimate of the costs that it will reasonably incur in the performance of its duties pursuant to this chapter.

(2) For purposes of implementing subdivision (a), that department shall maintain a record of its costs. In determining those costs, that department may consider costs that include, but are not limited to, costs relating to personnel requirements, materials, travel, and office overhead. The amount of reimbursement shall be equal to, and may not exceed, that department's actual costs.

(c) With the consent of the person or entity proposing the use of recycled water, the State Department of Health Services may delegate all or part of the duties that department performs pursuant to this chapter within a county to a local health agency authorized by the board of supervisors to assume these duties, if, in the judgment of that department, the local health agency can perform these duties. Any person or entity proposing the use of recycled water shall reimburse the local health agency for reasonable costs that the local health agency actually incurs in the performance of its duties delegated pursuant to this subdivision.

(d)(1) Upon a request from the person or entity proposing the use of recycled water, the local health agency shall, within a reasonable time after the receipt of the request, provide an estimate of the cost it will reasonably incur in the performance of its duties delegated under subdivision (c). (2) The local health agency, if delegated duties pursuant to subdivision (c), shall maintain a record of its costs that include, but is not limited to, costs relating to personnel requirements, materials, travel, and office overhead. The amount of reimbursement shall be equal to, and may not exceed, the local health agency's actual costs. (e) The State Department of Health Services or local health agency shall complete its review of a proposed use of recycled water within a reasonable period of time. That department shall submit to the person or entity proposing the use of recycled water a written determination as to whether the proposal submitted is complete for purposes of review within 30 days from the date of



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

receipt of the proposal and shall approve or disapprove the proposed use within 30 days from the date on which that department determines that the proposal is complete.

(f) An invoice for reimbursement of services rendered shall be submitted to the person or entity proposing the use of recycled water subsequent to completion of review of the proposed use, or other services rendered, that specifies the number of hours spent by the State Department of Health Services or local health agency, specific tasks performed, and other costs actually incurred. Supporting documentation, including receipts, logs, timesheets, and other standard accounting documents, shall be maintained by that department or local health agency and copies, upon request, shall be provided to the person or entity proposing the use of recycled water.

(g) For the purposes of this section, “person or entity proposing the use of recycled water” means the producer or distributor of recycled water submitting a proposal to the department.

**§ 13554.3.** Fees The State Water Resources Control Board may establish a reasonable schedule of fees by which it is reimbursed for the costs it incurs pursuant to Sections 13553 and 13554.

**§ 13555.5.** Proposed delivery of recycled water for state landscape use; pipe installation (a) If a recycled water producer determines that within 10 years the recycled water producer proposes to provide recycled water for use for state landscape irrigation that meets all of the conditions set forth in Section 13550, the recycled water producer shall so notify the Department of Transportation and the Department of General Services, and shall identify in the notice the area that is eligible to receive the recycled water, and the necessary infrastructure that the recycled water producer or the retail water supplier proposes to provide, to facilitate delivery of the recycled water.

(b) If notice has been provided pursuant to subdivision

(a), all pipe installed by the Department of Transportation or the Department of General Services for landscape irrigation within the identified area shall be of the type necessary to meet the requirements of Section 116815 of the Health and Safety Code and applicable regulations.

**§ 13555.2.** Finding on dual delivery systems. The Legislature hereby finds and declares that many local agencies deliver recycled water for nonpotable uses and that the use of recycled water is an effective means of meeting the demands for new water caused by drought conditions or population increases in the state. It is the intent of the Legislature to encourage the design and construction of water delivery systems on private property that deliver water for both potable and nonpotable uses in separate pipelines.

**§ 13555.3.** Requirement of dual delivery systems (a) Water delivery systems on private property that could deliver recycled water for nonpotable uses described in Section 13550, that are constructed on and after January 1, 1993, shall be designed to ensure that the water to be used for only potable domestic uses is delivered, from the point of entry to the private property to be served, in a separate pipeline which is not used to deliver the recycled water.

(b) This section applies to water delivery systems on private property constructed within either of the following jurisdictions:



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(1) One that has an urban water management plan that includes the intent to develop recycled water use.

(2) One that does not have an urban water management plan that includes recycled water use, but that is within five miles of a jurisdiction that does have an urban water management plan that includes recycled water use, and has indicated a willingness to serve the water delivery system.

(c) This section does not preempt local regulation of the delivery of water for potable and nonpotable uses and any local governing body may adopt requirements which are more restrictive than the requirements of this section.

**§ 13556.** Delivery of recycled water In addition to any other authority provided in law, any water supplier described in subdivision (b) of Section 1745 may acquire, store, provide, sell, and deliver recycled water for any beneficial use, including, but not limited to, municipal, industrial, domestic, and irrigation uses, if the water use is in accordance with statewide recycling criteria and regulations established pursuant to this chapter.

**§ 13557.** DPH regulations for plumbing recycled water delivery (a) On or before December 31, 2009, the department, in consultation with the State Department of Public Health, shall adopt and submit to the California Building Standards Commission regulations to establish a stateversion of Chapter 16 of the Uniform Plumbing Code adopted by the International Association of Plumbing and Mechanical Officials to provide design standards to safely plumb buildings with both potable and recycled water systems.

(b) Commencing July 1, 2011, and annually thereafter, the department shall review and update, as necessary, the regulations developed pursuant to subdivision (a).

(c) This section shall be exempt from the provisions of Section 161.

## **CHAPTER 7.5. WATER RECYCLING ACT OF 1991**

**§ 13575. Citation; definitions** (a) This chapter shall be known and may be cited as the Water Recycling Act of 1991. (b) As used in this chapter, the following terms have the following meanings: (1) “Customer” means a person or entity that purchases water from a retail water supplier. (2) “Entity responsible for groundwater replenishment” means any person or entity authorized by statute or court order to manage a groundwater basin and acquire water for groundwater replenishment.

(3) “Recycled water” has the same meaning as defined in subdivision (n) of Section 13050.

(4) “Recycled water producer” means any local public entity that produces recycled water.

(5) “Recycled water wholesaler” means any local public entity that distributes recycled water to retail water

suppliers and which has constructed, or is constructing, a recycled water distribution system.

(6) “Retail water supplier” means any local entity, including a public agency, city, county, or private water

company, that provides retail water service.

(7) “Retailer” means the retail water supplier in whose service area is located the property to which a customer

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

requests the delivery of recycled water service.

### **CHAPTER 7. WATER RECLAMATION ARTICLE 7. WATER REUSE**

**§ 13576.** The Legislature hereby makes the following findings and declarations:

- (a) The State of California is subject to periodic drought conditions.
- (b) The development of traditional water resources in California has not kept pace with the state's population, which is growing at the rate of over 700,000 per year and which is anticipated to reach 36,000,000 by the year 2010.
- (c) There is a need for a reliable source of water for uses not related to the supply of potable water to protect investments in agriculture, greenbelts, and recreation and to replenish groundwater basins, and protect and enhance fisheries, wildlife habitat, and riparian areas.
- (d) The environmental benefits of recycled water include a reduced demand for water in the Sacramento-San Joaquin Delta that is otherwise needed to maintain water quality, reduced discharge of waste into the ocean, and the enhancement of groundwater basins, recreation, fisheries, and wetlands.
- (e) The use of recycled water has proven to be safe from a public health standpoint, and the State Department of Public Health is updating regulations for the use of recycled water.
- (f) The use of recycled water is a cost-effective, reliable method of helping to meet California's water supply needs.
- (g) The development of the infrastructure to distribute recycled water will provide jobs and enhance the economy of the state.
- (h) Retail water suppliers and recycled water producers and wholesalers should promote the substitution of recycled water for potable water and imported water in order to maximize the appropriate cost-effective use of recycled water in California.
- (i) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment should cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service.

**§ 13577. Water recycling goals.** This chapter establishes a statewide goal to recycle a total of 700,000 acre- feet of water per year by the year 2000 and 1,000,000 acre-feet of water per year by the year 2010.

### **§ 13578. Report to the Legislature; task force**

(a) In order to achieve the statewide goal for recycled water use established in Section 13577 and to implement the Governor's Advisory Drought Planning Panel Critical Water Shortage Contingency Plan recommendations, Section F2, as submitted December 29, 2000, the department shall identify and report to the Legislature on opportunities for increasing the use of recycled water, as defined in paragraph (3) of subdivision (b) of Section 13575, and identify constraints and impediments, including

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

the level of state financial assistance available for project construction, to increasing the use of recycled water.

(b) The department shall convene a task force, to be known as the 2002 Recycled Water Task Force, to advise the department in implementation of subdivision (a), including making recommendations to the Legislature regarding the following: (1) How to further the use of recycled water in industrial and commercial applications, including, but not limited to, those applications set forth in Section 13552.8.

The task force shall evaluate the current regulatory framework of state and local rules, regulations, ordinances, and permits to identify the obstacles and disincentives to industrial and commercial reuse. Issues to be investigated include, but are not limited to, applicability of visual inspections instead of pressure tests for cross-connections between potable and nonpotable water systems, dual piping trenching restrictions, fire suppression system design, and backflow protections.

(2) Changes in the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials, that are appropriate to facilitate the use of recycled water in industrial and commercial settings. The department shall make recommendations to the California Building Standards Commission with regard to suggested revisions to the California Plumbing Code necessary to incorporate the changes identified by the task force.

(3) Changes in state statutes or the current regulatory framework of state and local rules, regulations, ordinances, and permits appropriate to increase the use of recycled water for commercial laundries and toilet and urinal flushing in structures including, but not limited to, those defined in subdivision (c) of Section 13553. The department shall identify financial incentives to help offset the cost of retrofitting privately and publicly owned structures.

(4) The need to reconvene the California Potable Reuse Committee established by the department in 1993 or convene a successor committee to update the committee's finding that planned indirect potable reuse of recycled water by augmentation of surface water supplies would not adversely affect drinking water quality if certain conditions were met.

(5) The need to augment state water supplies using water use efficiency strategies identified in the CALFED Bay-Delta Program. In its report pursuant to subdivision (a), the department shall identify ways to coordinate with CALFED to assist local communities in educating the public with regard to the statewide water supply benefits of local recycling projects and the level of public health protection ensured by compliance with the uniform statewide water recycling criteria developed by the State Department of Public Health in accordance with Section 13521.

(6) Impediments or constraints, other than water rights, related to increasing the use of recycled water in applications for agricultural, environmental, or irrigation uses, as determined by the department.

(c) (1) The task force shall be convened by the department and be comprised of one representative from each of the following state agencies:

(A) The department.

(B) The State Department of Public Health.

(C) The state board.

(D) The California Environmental Protection Agency.

(E) The CALFED Bay-Delta Program.

(F) The Department of Food and Agriculture.

(G) The California Building Standards Commission.

(H) The University of California.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(l) The Natural Resources Agency.

(2) The task force shall also include one representative from a recognized environmental advocacy group and one

representative from a consumer advocacy group, as determined by the department, and one representative of local agency health officers, one representative of urban water wholesalers, one representative from a groundwater management entity, one representative of water districts, one representative from a nonprofit association of public and private members created to further the use of recycled water, one representative of commercial real estate, one representative of land development, one representative of industrial interests, and at least two representatives from each of the following as defined in Section 13575:

(A) Recycled water producer.

(B) Recycled water wholesaler.

(C) Retail water supplier.

(d) The department and the task force shall report to the Legislature not later than July 1, 2003.

(e) The department shall carry out the duties of this section only to the extent that funds pursuant to Section 79145, enacted as part of the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act (Division 26 (commencing with Section 79000)), are made available for the purposes of this section.

### **§ 13579. Potential uses and sources**

(a) In order to achieve the goals established in Section 13577, retail water suppliers shall identify potential uses for recycled water within their service areas, potential customers for recycled water service within their service areas, and, within a reasonable time, potential sources of recycled water.

(b) Recycled water producers and recycled water wholesalers may also identify potential uses for recycled water, and may assist retail water suppliers in identifying potential customers for recycled water service within the service areas of those retail water suppliers.

(c) Recycled water producers, retail water suppliers, and entities responsible for groundwater replenishment may cooperate in joint technical, economic, and environmental studies, as appropriate, to determine the feasibility of providing recycled water service and recycled water for groundwater replenishment consistent with the criteria set forth in paragraphs (1) to (3), inclusive, of subdivision (a) of Section 13550 and in accordance with Section 60320 of Title 22 of the California Code of Regulations.

## **CHAPTER 7.5. WATER RECYCLING ACT OF 1991**

**§ 13580.** Application for supply (a) A retail water supplier that has identified a potential use or customer pursuant to Section 13579 may apply to a recycled water producer or recycled water wholesaler for a recycled water supply.

(b) A recycled water producer or recycled water wholesaler that has identified a potential use or customer pursuant to Section 13579 may, in writing, request a retail water supplier to enter into an agreement to provide recycled water to the potential customer.

(c) A customer may request, in writing, a retailer to enter into an agreement to provide recycled water to the customer.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(d)(1) An entity responsible for groundwater replenishment that is a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request that retail water supplier to enter into an agreement to provide recycled water for that purpose.

That entity may not obtain recycled water for that purpose from a recycled water producer, a recycled water wholesaler, or another retail water supplier without the agreement of the entity's retail water supplier.

(2) An entity responsible for groundwater replenishment that is not a customer of a retail water supplier and that has identified the potential use of recycled water for groundwater replenishment purposes may, in writing, request a retail water supplier, a recycled water producer, or a recycled water wholesaler to enter into an agreement to provide recycled water for that purpose.

**§ 13580.5.** Agreement to provide recycled water (a)(1) Subject to subdivision (e) of Section 13580.7, a retail water supplier that receives a request from a customer pursuant to subdivision (c) of Section 13580 shall enter into an agreement to provide recycled water, if recycled water is available, or can be made available, to the retail water supplier for sale to the customer.

(2) Notwithstanding paragraph (1), in accordance with a written agreement between a recycled water producer or a recycled water wholesaler and a retail water supplier, the retail water supplier may delegate to a recycled water producer or a recycled water wholesaler its responsibility under this section to provide recycled water.

(b) A customer may not obtain recycled water from a recycled water producer, a recycled water wholesaler, or a retail water supplier that is not the retailer without the agreement of the retailer.

(c) If either a recycled water producer or a recycled water wholesaler provides a customer of a retail water supplier with a written statement that it can and will provide recycled water to the retailer, the retail water supplier shall, not later than 120 days from the date on which the retail water supplier receives the written statement from the customer, by certified mail, return receipt requested, submit a written offer to the customer. A determination of availability pursuant to Section 13550 is not required.

(d) If the state board pursuant to Section 13550 makes a determination that there is available recycled water to serve a customer of a retail water supplier, the retail water supplier, not later than 120 days from the date on which the retail water supplier receives a copy of that determination from the customer, by certified mail, return receipt requested, shall submit a written offer to the customer.

**§ 13580.7.** Public agency supplier (a) This section applies only to a retail water supplier that is a public agency. (b) A customer may request, in writing, a retail water supplier to enter into an agreement or adopt recycled water rates in order to provide recycled water service to the customer. The retail water supplier, by certified mail return receipt requested, shall submit a written offer to the customer not later than 120 days from the date on which the retail water supplier receives the written request from the customer.

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

(c) If no rate is in effect for recycled water service within the service area of a retail water supplier, the rate and conditions for recycled water service shall be established by contract between the retail water supplier and the customer, not later than 120 days from the date on which the customer requests a contract, or, by resolution or ordinance by the retail water supplier, not later than 120 days from the date on which the retail water supplier receives the customer's written request for an ordinance or resolution.

(d) A rate for recycled water service established by contract, ordinance, or resolution, shall reflect a reasonable relationship between the amount of the rate and the retail cost of obtaining or producing the recycled water, the cost of conveying the recycled water, and overhead expenses for providing recycled water service. Capital costs of facilities required to serve the customer shall be amortized over the economic life of the facility, or the length of time the customer agrees to purchase recycled water, whichever is less. The rate shall not exceed the estimated reasonable cost of providing the service, and any additional costs agreed to by the customer for recycled water supplemental treatment. (e) The rate for recycled water shall be comparable to, or less than, the retail water supplier's rate for potable water. If recycled water service cannot be provided at a rate comparable to, or less than, the rate for potable water, the retail water supplier is not required to provide the recycled water service, unless the customer agrees to pay a rate that reimburses the retail water supplier for the costs described in subdivision (c).

(f) The offer required by subdivisions (c) and (d) of Section 13580.5 shall identify all of the following: (1) The source for the recycled water. (2) The method of conveying the recycled water. (3) A schedule for delivery of the recycled water. (4) The terms of service. (5) The rate for the recycled water, including the per-unit cost for that water. (6) The costs necessary to provide service and the basis for determining those costs.

(g) This section does not apply to recycled water service rates established before January 1, 1999, or any amendments to those rates.

**§ 13580.8.** Suppliers regulated by the P.U.C. (a) This section applies only to a retail water supplier that is regulated by the Public Utilities Commission. (b) Rates for recycled water that is provided to the customer by a retail water supplier regulated by the Public Utilities Commission shall be established by the commission pursuant to Section 455.1 of the Public Utilities Code. A regulated water utility may request the commission to establish the rate or rates for the delivery of recycled or nonpotable water, with the objective of providing, where practicable, a reasonable economic incentive for the customer to purchase recycled or nonpotable water in place of potable water. (c) A regulated water utility may propose a rate or rates for recycled or nonpotable water by tariff or by contract between the retail water supplier and the customer. Where the rate or rates are set by contract, the water utility and its customer shall meet, confer, and negotiate in good faith to establish a contract rate.

(d) The commission shall, as appropriate, provide a discount from the general metered rate of the water utility for potable water by either of the following means: (1) Passing through to the customer the net reduction in cost to the water utility in purchasing and delivering recycled or nonpotable water as compared to the cost of purchasing and delivering potable water. (2) Granting to the customer a

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

uniform discount from the water utility's general metered potable water rate when the discount in paragraph (1) is determined to be an insufficient incentive for the customer to convert to the use of recycled or nonpotable water. If the commission provides for a discount pursuant to this paragraph that is greater than the water utility's reduction in cost, the commission shall authorize the water utility to include the aggregate amount of that discount in its revenue requirements to be applied to, and recovered in, rates that are applicable to all general metered customers.

**§ 13580.9.** West Covina (a) Notwithstanding any other law, and except as otherwise previously provided for in a contract agreed to by the customer and the City of West Covina, if the purchaser, contractor, or lessee of, or successor to, all or a portion of the water utility owned by the City of West Covina is a retail water supplier that is regulated by the Public Utilities Commission, rates for recycled or nonpotable water service to a closed hazardous waste and solid waste facility located within the boundaries of the City of West Covina for the purposes of irrigation, recreation, or dust suppression or any other use at that facility shall be established in accordance with subdivisions (a) to (e), inclusive, of Section 13580.7, and if there is a failure to agree on the terms and conditions of a recycled or nonpotable water supply agreement for the delivery of water for those purposes by that purchaser, contractor, lessee, or successor, Section 13581 shall apply. (b) For the purpose of this section, nonpotable water that is not the result of the treatment of waste shall be treated as the equivalent of recycled water if it is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor considered a valuable resource, if the use of that water will not adversely affect downstream water rights, degrade water quality, or be injurious to plant life, fish, or wildlife, as provided by statute or by regulations of the State Department of Public Health and the state board or a regional board, as appropriate.

**§ 13581.** Mediation of agreements (a) If there is a failure to agree on terms and conditions of a recycled water supply agreement involving a retail water supplier that is a public agency within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, any party may request a formal mediation process. The parties shall commence mediation within 60 days after the mediation request is made. If the parties cannot agree on a mediator, the director shall appoint a mediator. The mediator may recommend to the parties appropriate terms and conditions applicable to the service of recycled water. The cost for the services of the mediator shall be divided equally among the parties to the mediation and shall not exceed twenty thousand dollars (\$20,000).

(b) If the parties in mediation reach agreement, both parties together shall draft the contract for the recycled water service. The parties shall sign the contract within 30 days.

(c) If the parties in mediation fail to reach agreement, the affected retail water supplier shall, within 30 days, by resolution or ordinance, adopt a rate for recycled water service. The agency action shall be subject to validating proceedings pursuant to Chapter 9 (commencing with Section 860) of Part 2 of Title 10 of the Code of Civil Procedure, except that there shall not be a presumption in favor of the retail water supplier under the action taken to set the rate for recycled water service. The mediator shall file a report with the superior court setting forth the recommendations provided to the parties regarding appropriate terms and conditions applicable to the service of recycled water. Each party shall bear its own costs and attorney's fees.



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment E

**§ 13581.2.** Determination by the P.U.C. If the retail water supplier is regulated by the Public Utilities Commission, and there is a failure to agree on terms and conditions of a recycle water supply agreement with a customer within 180 days from the date of the receipt of a request for recycled water pursuant to subdivision (c) of Section 13580, a written statement pursuant to subdivision (c) of Section 13580.5, or a determination of availability pursuant to subdivision (d) of Section 13580.5, the matter shall be submitted to the Public Utilities Commission for resolution, and the commission shall determine a contract rate or rates for recycled water as provided in Section 13580.8.

**§ 13582.** Rights, remedies, obligations This chapter is not intended to alter either of the following: (a) Any rights, remedies, or obligations which may exist pursuant to Article 1.5 (commencing with Section 1210) of Chapter 1 of Part 2 of Division 2 of this code or Chapter 8.5 (commencing with Section 1501) of Part 1 of Division 1 of the Public Utilities Code.

(b) Any rates established or contracts entered into prior to January 1, 1999.

**§ 13583.** Failure to comply (a) If a retail water supplier that is a public agency does not comply with this chapter, the customer may petition a court for a writ of mandate pursuant to Chapter 2 (commencing with Section 1084) of Title 1 of Part 3 of the Code of Civil Procedure.

(b) If a retail water supplier is regulated by the Public Utilities Commission and does not comply with this chapter, the Public Utilities Commission may order the retailer to comply with this chapter after receiving a petition from the customer specifying the provisions of this chapter with which the retailer has failed to comply.



# Recycled Water Workshop Report

---

February 1, 2013

## Attachment F

### *Workshops 1 and 2 Summaries*

# Recycled Water Workshop Report

---

February 1, 2013

Attachment F

R.10-11-014 GW2/eam

**Recycled Water Order Instituting Rulemaking (OIR) 10-11-014  
Proposed Summary of August 30, 2011 CPUC Workshop  
Workshop 1: State Regulation of Investor-Owned Water Company  
Recycled Water Projects: Informing the Search for a New CPUC Policy  
Framework**

Online files containing seven of the presentations made at the first Recycled Water OIR Workshop, held in San Francisco on August 30, 2011, are accessible at <http://www.cpuc.ca.gov/PUC/Water/WaterEvents/>.

The presentations include ones by the California Department of Public Health, the State Water Resources Control Board, and the Department of Water Resources, as well as by San Gabriel Valley Water Company, San Jose Water Company, Suburban Water Systems, Park Water Company, and California Water Service Company.

Below is an overview of additional issue arenas which were discussed during Workshop 1, and which warrant further consideration and more in depth treatment in upcoming workshops.

## **1) Investor-owned Water Utilities (IOWUs) Liability**

The decision in *Hartwell Corp. v. Superior Court* (2002), 27 Cal. 4th 256, established that both public and private recycled water producers and suppliers may be held liable for civil damages due to the delivery of contaminated water to customers. Against the backdrop of the exposure to such liability, California's IOWUs are seeking in this OIR proceeding a clear articulation of CPUC jurisdiction and policy bearing on the participation of IOWU's in the funding, development and delivery of recycled water. The CPUC comprehensive policy framework for recycled water sought here, in combination and coordination with other state agencies regulating recycled water, could contain guidelines or rules that would have the effect of standards by which IOWUs' conduct and liability might be partially evaluated.

## **2) Timing of CPUC Regulatory Sequencing for Recycled Water Projects**

Currently, IOWUs' present recycled water projects for consideration during General Rate Case proceedings on a three year rate case cycle.

# Recycled Water Workshop Report

---

February 1, 2013

Attachment F

IOWU presenters at Workshop I indicated that recycled water project opportunities are often time limited and time sensitive in nature due to a variety of factors, i.e., partnership opportunities based on funding sources requiring timely approvals, commercial/industrial customer sector driven opportunities with narrow time windows for obtaining approvals, etc.

The IOWUs want the CPUC to consider adopting a more flexible process and/or broader time horizon for the approval of IOWU recycled water projects. Staff note that this proceeding might be informed by the flexible project development and approval processes adopted by the CPUC to help energy IOU's meet time-critical renewable portfolio standards.

### **3) Beyond "One Size Fits All": Acknowledging Local & Regional Differences**

Parties generally agreed that recycled water supply planning, funding, development and implementation are key elements of regional and local water resource planning processes, including those required in the State's Regional Integrated Water Resource Management Program, Urban Water Management Plans, Regional Recycled Water Master Plans, AB 32 (statewide GHG emissions reduction) and other environmental mandates.

Therefore, it is important to develop a CPUC recycled water policy framework and associated regulatory processes and requirements that acknowledge how specific regional water supply characteristics can affect the timing and/or ability of IOWUs to supply cost effective recycled water to customers in their particular service areas. Significant regional characteristics that can inform a CPUC comprehensive framework for recycled water include:

- Region-specific conditional water supply loading orders which place conservation as the first source of local water supply, and develop subsequent priorities in water supply portfolios based upon the costs and benefits (including social and environmental elements such as Statewide energy efficiency/GHG policies) of particular sources. The sources range from recycled water/water distribution systems, urban reuse water (gray water, cistern rainwater collection, stormwater capture), groundwater, to desalinated water;
- Availability of funding (federal, state, regional, local public and/or private) to support regional recycled water projects;

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment F

- Proximate availability of recycled water supplies including recycled Water
  - \* as a by-product of other commercial/industrial endeavors needing large recycled water systems;
  - \* as a by-product of other environmental regulatory actions to meet federal or state water quality requirements which may result in the production of increased regional supplies of recycled water, and/or
  - \* as a result of regional subsidies which may incentivize recycled water production; and,
- Reliable and committed customer bases to ensure cost recovery for cost effective recycled water supplies (and associated distribution systems) produced and/or distributed by IOU's.

### **4) Key Funding Considerations for CPUC Policy Framework**

Currently, IOWUs have limited access to State funding as sole proponents for recycled water projects which narrows the ability of IOU's to pursue funding to support such projects without public sector partners. Parties expressed interest in broadening the access of IOWUs to all sources of relevant public funding and asked that the CPUC particularly consider the sequencing of funding requirements with IOWU applications for recycled water projects to reflect these public funding limitations and the IOWU's current dependence upon public sector partnerships for most public sector funding for recycled water projects. Parties also expressed the need for the forthcoming CPUC comprehensive policy framework to foster benefit-cost evaluation of higher, and more costly, treatment levels for recycled water in particular regions.

### **5) Key Rate-Making and Cost Considerations Specific to IOWUs**

CPUC regulated utilities determine rates based upon cost of service rate-making which may conflict with alternative means of determining rates for recycled water service based upon other principles such as demand creation (e.g., where recycled water is offered at discounted rates and/or lower than the cost of potable water supplies in the same region).

# Recycled Water Workshop Report

---

February 1, 2013

Attachment F

IOWUs have asked that this proceeding consider these conflicts in approaches to ratemaking when setting policy parameters that might contain enhanced requirements for recycled water production and/or delivery by regulated water utilities. Similarly, parties asked that this proceeding consider the issue of stranded costs for IOWUs which develop/co-develop recycled water distribution systems, and/or distribute recycled water. When IOWUs encourage certain potable water customers to exit potable water services the result can be a diminished customer base that must cover the cost of the potable water service. This can leave the IOWU to assume the difference should the existing customer base be insufficient to cover the cost of potable water service.

## **6) Need for Additional Recycled Water Pilot Projects to Support Enhanced Local Water Supply Development**

IOWU parties expressed their desire to increase their participation in pilot projects such as groundwater recharge efforts to expand safe and cost effective local water supplies across the state. They requested that this proceeding encourage those pilot efforts across both funding and inter-agency policy coordination horizons.

# Recycled Water Workshop Report

---

February 1, 2013

Attachment F

## Recycled Water Order Instituting Rulemaking R.10-11-014

### Workshop Summary

#### Workshop 2:

#### Economic and Financial Parameters for Evaluating Recycled Water Projects

Please consult <http://www.cpuc.ca.gov/PUC/Water/WaterEvents/> for the presentations offered by workshop presenters at the second Recycled Water OIR Workshop held in San Francisco on November 21, 2011. These presentations include slide presentations offered by the California Department of Water Resources, the University of California-Davis Center for Watershed Sciences, the CPUC Division of Ratepayer Advocates-Water Branch, and Suburban Water Systems.

The goal of the second Recycled Water Workshop, set against the backdrop of regional integrated water resource planning, was to identify ingredients for:

- I. a CPUC recycled water project application process;
- II. methodologies for evaluating reasonableness and cost effectiveness; and
- III. associated minimum data requirements.

The workshop began with an in depth presentation and discussion of the **Guidelines for Preparing Economic Analysis for Water Recycling Projects** developed and presented by staff from the State Economic Analysis Task Force for Water Recycling in California. Below are issue arenas which were discussed during Workshop 2 or inspired by it and are highlighted here for further consideration as this proceeding progresses.

#### 1) **Inherent Pricing Challenges: Narrow and More Inclusive Marginal Cost**

**Considerations**Presenters from the State Interagency Economic Analysis for Recycled Water Projects Taskforce posited that, while recycled water agencies (and by extension IOU Water Companies) perceive their marginal cost to be either their own sources of supply or the wholesale price of purchased water supplies, such an approach to determining marginal cost does not fully capture the true social marginal cost of the ultimate source of water supply developed at the regional (and/or state) levels. This creates a disconnect between the pricing of reclaimed water developed at local levels by wholesale and retail agencies, and the true price of developing freshwater supplies. The marginal price of water determined by recycled water agencies and their

# Recycled Water Workshop Report

---

February 1, 2013

## Attachment F

retailers is generally determined by melded averages of past and current projects and does not fully account for the marginal cost of existing and/or new water supplies. Sponsoring/wholesale agency's pricing considerations tend to reflect the consequences of single-agency water supply planning, neglecting public (or regional/statewide/societal) costs, benefits and externalities. This disconnect between more inclusive marginal cost and the pricing of recycled water is significant for this proceeding as parties seek to define a general policy framework which balances cost of service ratemaking requirements with the State's statutorily mandated policies addressing the wider social, environmental, and economic benefits of supplanting imported potable water with local recycled water supplies. Tension exists in recycled water pricing between the requirement for cost of service rate-making and State policies governing water use efficiency and energy efficiency which reflect a more inclusive marginal cost approach to valuing the highest net benefit to society as a whole. Future consideration of this tension should contribute toward the development of a balanced policy framework for recycled water. While expressing their support for full social cost accounting as put forward in the **Guidelines** i.e. true marginal cost approach, for evaluating recycled water projects, consumer advocates particularly question the reasonableness of having IOU ratepayers underwrite regional or statewide environmental and social benefits, and suggest that this proceeding consider other approaches, i.e. expansion of state recycled water funding sources, to reduce or offset the costs of IOU Water Company water recycling projects. These parties also called for this proceeding to create a means by which to evaluate, measure, and verify the future social, environmental, and economic benefits ascribed to recycled water projects, offering the promise of achieving wider societal benefits such as GHG emission reductions and water supply reliability.

## **2) Potential of Stranded Costs For IOU Water Companies**

Suburban Water Systems discussed the potential for stranded costs whereby the shift of potable water system customers to recycled water customers creates an increasingly large pool of customers who bypass the payment of fixed costs. The result is a smaller pool of potable water system customers while the fixed costs to deliver potable water remain the same for the IOU Water Company. IOU Water Companies are requesting that the potential for stranded costs and remedies be addressed in this proceeding.

## **3) Establishing A Minimum Threshold for IOU Recycled Water Applications**

Consumer advocates requested that this proceeding consider establishing a minimum threshold approach for determining when an IOU may use an application process for seeking Commission approval for recycled water projects. Among the threshold considerations they presented were that the project should be of substantial value, e.g., greater than \$5 million; that the IOU and other utilities are jointly engaged in the proposed project; and that the project involves a significant amount of recycled water, e.g., greater than 250 acre feet.